

09/623746

533 Rec'd PCT/PTO 08 SEP 2000

SEQUENCE PROTOCOL

<110> metaGen Corporation for Genome Research

<120> Human nucleic acid sequences from prostate tissue

<130> S1570AWOM1KX14-P

<140> PCT/DE99/00722

<141> 1999-03-09

<160> 295

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<211> 707

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<213> homo sapiens

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<400> 6
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<210> 8
<211> 1228
<212> DNA
<213> homo sapiens

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<400> 8
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<210> 9
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<212> DNA
<213> homo sapiens

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<400> 9

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<211> 1126

<212> DNA

<213> homo sapiens

<400> 10

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<210> 11

<400> 11

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<210> 12

<211> 538

<212> DNA

<213> homo sapiens

<400> 12

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tttctgttga	ccctgttgat	tgagcatgac	tactaaatat	tatgtaataa	aaagcatttg	360
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<210> 13
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<212> DNA
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<212> DNA
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caagggtccc atccattctc cagttgaact caagcatgtg catgcaactg tggttaaagt 780
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gatcaaa

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<210> 15
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<210> 16
<211> 573
<212> DNA
<213> homo sapiens

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<400> 16
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<210> 17
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 <212> DNA
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<400> 17

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<210> 18
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<400> 18

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<210> 19
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<400> 19

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<210> 21
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<210> DNA
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<400> 21

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<400> 22

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<210> 23

<211> 580

<212> DNA

<213> homo sapiens

<400> 23

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<210> 24

<211> 740

<212> DNA

<213> homo sapiens

<400> 24

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<210> 26
 <211> 275
 <212> DNA
 <213> homo sapiens

<400> 26

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<210> 27
 <211> 854
 <212> DNA
 <213> homo sapiens

<400> 27

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<210> 28
 <211> 802
 <212> DNA
 <213> homo sapiens

<400> 28

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<210> 29
 <211> 307
 <212> DNA
 <213> homo sapiens

<400> 29

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<400> 30

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<210> 31
 <211> 501
 <212> DNA
 <213> homo sapiens

<400> 31

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501

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<210> 32
<211> 1104
<212> DNA
<213> homo sapiens

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<400> 32

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1104

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<210> 33
<211> 810
<212> DNA
<213> homo sapiens

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<400> 33

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810

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<210> 34
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<210> 35
<211> 826
<212> DNA
<213> homo sapiens

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<400> 35

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<210> 36

<211> 579

<212> DNA

<213> homo sapiens

<400> 36

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<210> 37

<211> 799

<212> DNA

<213> homo sapiens

<400> 37

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<400> 33

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<210> 39

<211> 1743

<212> DNA

<213> homo sapiens

<400> 39

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1743

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<210> 41

<211> 1183

<212> DNA

<213> homo sapiens

<400> 41

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1183

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 <213> homo sapiens

<400> 42

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 <213> homo sapiens

<400> 43

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 <212> DNA
 <213> homo sapiens

<400> 44

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<210> 46
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<210> 47
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 <212> DNA
 <213> homo sapiens

<400> 47

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<210> 49
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<210> 50
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<210> 51
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 <212> DNA
 <213> homo sapiens

<400> 51

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 <212> DNA
 <213> homo sapiens

<400> 52

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<210> 53
 <211> 985
 <212> DNA
 <213> homo sapiens

<400> 53

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<210> 54

<211> 622

<212> DNA

<213> homo sapiens

<400> 54

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<210> 55

<211> 1129

<212> DNA

<213> homo sapiens

<400> 55

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ctaaattgat ttgtaattct aaattactga caaactccta tccccatttt tgctaaactc 1020
aatctctggg tttgggtatat atccattcca gcttaatgcc tctaatttta atgccaaaca 1080

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1129

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<400> 56
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<210> 57
<400> 57
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<210> 58
<211> 877
<212> DNA
<213> homo sapiens

<400> 58

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taatatatat	ttcccccttg	tctctgtgat	ctcttattta	tactatatta	ttgtcccatg	180
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attatacaga	ctttgctttt	agaaatagat	taggttccaa	acagaaagt	caagtgtaac	300
aacaacaata	aaaatagatt	atgaaacagg	ctataattgg	ctcttttggg	tttgataggg	360
gcaagatgaa	aggcaacttt	cttgcttttg	aaatcatgtt	gggtaagagg	taaggaatcc	420
agctacaatt	ttattagtgc	ttgaaacggg	cttccttgaa	ttctccaggc	cctatcattt	480
ttttttttct	tactaatcag	aagagagctg	gggtagaagc	cccatgtttg	tattccatga	540
aacacgtcgg	gttggagtaa	aggcaaaaac	agctagacac	accagggtgtg	tctgtttgac	600
atttataagc	tggcactcat	caacactcct	gtttctcctt	ctctctgggac	gtgtggatta	660
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ataccaacca	gtaagatccc	aaataacttg	agaaaaattg	tttctgtatc	tgtccacttc	780
tgggtgtcaaa	gattttactc	atcttcttag	tacattctat	gtattttata	tgtataattt	840
tatacaatta	aaaatagatt	tttgtctagt	gaaaaaaa			877

<210> 59
<211> 1329
<212> DNA
<213> homo sapiens

<400> 59

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aagtgtctggc	aagagcgatg	tctactactt	cagtcctaagt	ggtaagaagt	tcagaagcaa	180
gcctcagttg	gcaagggtacc	tgggaaatac	tgttgatctc	agcagttttg	acttcagaac	240
tggaaagatg	atgcctagta	aattacagaa	gaacaaacag	agactgcgaa	acgatcctct	300
caatcaaaaat	aagggtaaac	cagacttgaa	tacaacattg	ccaattagac	aaacagcatc	360
aatttttcaaa	caaccggtaa	ccaaagtcac	aaatcatcct	agtaataaaag	tgaaatcaga	420
cccacaacga	atgaatgaac	agccacgtca	gctttttctgg	gagaagaggc	tacaaggact	480
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aggagttggg	ccaggtagca	atgatgagac	cctttttatct	gctgttgcca	gtgcttttga	600
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<210> 60
 <211> 637
 <212> DNA
 <213> homo sapiens

<400> 60

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ggccaaacct tgaacctgcc agaggtggaa ggggaaaagg agaaggtgat ttgagccaac 180
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gagagagagc tgctgcaaga gagaaaaata gggatcgtcc aacctgagaa catacaacct 360
cctcttcagt gtcaaaaaag ccacggttag accagattcc tgccgccaac cttgatgcag 420
atgacctctt aacagatgag gaagatgaag attttgaaga agaaagtgat gatgatgata 480
ctgcagctct tcttgcaaaa ctggaaaaaa ttaaaaaaga aagagctgaa aagggccaaag 540
gccacgggaa gggaccaagg gccaaaaaag ctttaagggg ggaagggtt tcgttttggg 600
aaaacattgg ttgggcggga aaccttttcc ctttaattct gagcttggcc catccaagc 660
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<210> 61
 <211> 1389
 <212> DNA
 <213> homo sapiens

<400> 61

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gagcagagca gccatctttt aagtggggct gtatcaggct ggggtttattt aaaagcaaca 180
aaatgttttg gtttaagaaa ttatttttgc ttcatgttaa atcttcgcag tgttctaana 240
aaagtccagt cttctgctcg cccctttccc tcaactgatg ctgcacttgg ttgaggtctc 300
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gatttgtagt tgtgtgtgca gcacttcgcc ctgatattgt tgctctacaa taaaaaccaa 1380
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<210> 62
 <211> 535
 <212> DNA
 <213> homo sapiens

<400> 62

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caagatagaa cctttagata ctccaactca ccaaaatgta aaaaaactaa caaaaatatt 180
tggctctcaa taatgctaaa tatctacatt tttagaattt atcaacattt aactagataa 240
ttgggcattg ctttaattatg catgtactta tccatactaa taaaattgac aatgctagtg 300

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cacactttatt ggctttagtcc tattatcagg atataatcat ctgtgaggag gatatttttaa 360
atactgtaaa tgataaacagt taatgatata cacattttaga ctgagttgca cactggcagg 420
gagaccacaaa acatttacctc cactactgtg tcatgattctt tttttttttg agagagtctc 480
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<210> 53
<211> 1098
<212> DNA
<213> homo sapiens

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<400> 53
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cagaagtatt ctacaagatg agacaaacag atcgggatgt aataacagca ttaactcaca 300
gaccttggag cctaagccat acaggagatg ggaaaccacg ctatgatact ttctggaaac 360
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acctgtgtgg aatttccagc tccctcatgc aaaaggattt tgtatccccg gcctacttga 480
agaagtggtc agctaaagga atccagggtg ttggttggac tgttaatacc ttgatgaaa 540
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gcgaacctca ctcttagact ttccagggtg gacgaaacgg gttcagaaac tgccaggggc 660
ctcatacagg gatatacaaaa taccctttgt gctagcccag gccctgggga atcaggtgac 720
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<210> 64
<211> 1860
<212> DNA
<213> homo sapiens

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<400> 64
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atgtctcatt tacagtataa aactcaaaagg tagatgtaat ttttacacct atgagtattt 180
gtccaatttc tgtctcttcc tcaccatttg gtatctattc tttatatgta aataagataa 240
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tggttttctt gtataccaat aattaagcca ctactgttgg cactgtttgg ttttctattt 1380
taacactgaa ggagtgaag tatttccat atttatgaat ttactactaa aatctggcal 1440

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atttcactat tatataaagt caataaaaat gaagtagttg tatatatgca acattgtgt1620
cagaggggaa ataatgaata gtattaaaga aacattctcg tcttcttcta cctttaatcc1680
cctaatacct agtctacttt ttaaattttc agacttcact gctttttgaa ttcataattc1740
taattttcac attattgtta atggaaaatc atatctaata aaggttttag ttattcccat1800
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<210> 65
 <400> 65
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<210> 66
 <211> 205
 <212> PRT
 <213> homo sapiens

<400> 66

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Ser	Ala	Ala	Asp 20	Ala	Ile	Asn	Pro	Trp 25	Pro	Gly	Arg	Ser	Ser 30	Arg	Pro
Arg	Ser	Arg 35	Ala	Ala	Val	Pro	His 40	Arg	Leu	Leu	His	Leu 45	Pro	Pro	Val
Cys 50	Ala	Glu	Leu	Gln	Gly	Gln 55	Gln	Phe	Tyr	Ser	Leu 60	Glu	Gly	Ala	Pro
Tyr 65	Cys	Glu	Gly	Cys	Tyr 70	Thr	Asp	Thr	Leu	Glu 75	Lys	Cys	Asn	Thr	Cys 80
Gly	Glu	Pro	Ile	Thr 85	Asp	Arg	Met	Leu	Arg 90	Ala	Thr	Gly	Lys	Ala 95	Tyr
His	Pro	His	Cys 100	Phe	Thr	Cys	Val	Val 105	Cys	Ala	Arg	Pro	Leu 110	Glu	Gly
Thr	Ser	Phe 115	Ile	Val	Asp	Gln	Ala 120	Asn	Arg	Pro	His	Cys 125	Val	Pro	Asp
Tyr	His 130	Lys	Gln	Tyr	Ala	Pro 135	Arg	Cys	Ser	Val	Cys 140	Ser	Glu	Pro	Ile
Met 145	Pro	Glu	Pro	Gly	Arg 150	Asp	Glu	Thr	Val	Arg 155	Val	Val	Ala	Leu	Asp 160
Lys	Asn	Phe	His	Met 165	Lys	Cys	Tyr	Lys	Cys 170	Glu	Asp	Cys	Gly	Lys 175	Pro
Leu	Ser	Ile	Glu 180	Ala	Asp	Asp	Asn	Gly 185	Cys	Phe	Pro	Leu	Asp 190	Gly	His

Val Leu Cys Arg Lys Cys His Thr Ala Arg Ala Gln Thr
 195 200 205

<210> 57
 <211> 150
 <212> PRT
 <213> hcmo sapiens

<400> 67

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Asp	Arg	Ser	Pro	Ser	Leu	Glu	Ser	Gln	Ser	Arg	Lys	Thr	Pro	Arg	Leu
			20					25					30		
Pro	Glu	Asp	Leu	Ala	Ser	Gly	Lys	Lys	Asp	Tyr	Thr	Phe	Gln	Arg	Pro
		35					40					45			
Leu	Arg	Arg	Arg	Asp	Arg	Lys	Arg	Arg	Ala	Ser	Arg	Val	Ser	Leu	Arg
	50					55					60				
Val	Asp	Pro	Ser	Asp	His	Gly	Gly	Pro	Gly	Val	Val	Ala	Asp	Glu	Val
65					70					75					80
Pro	His	Gln	Gly	Lys	Cys	Gly	Trp	Gly	Arg	Arg	Leu	Pro	Gly	Val	Arg
				85					90					95	
Pro	Gly	Ala	Ala	Gly	Ala	Gln	Arg	Gln	Glu	Pro	Gly	Ser	Pro	Thr	Glu
			100					105					110		
Gly	Trp	Gly	Gly	Gly	Pro	Pro	Arg	His	Val	Pro	Val	Gln	Pro	Val	Arg
		115					120					125			
Val	Ser	Ala	Asp	Arg	Pro	Ala	Asp	Thr	Pro	Ala	Pro	Ser	Pro	Ser	Lys
	130					135					140				
Asp	Leu	Leu	Ser	His	Pro										
145					150										

<210> 68
 <211> 55
 <212> PRT
 <213> homo sapiens

<400> 68

Leu	Leu	Glu	Cys	Arg	His	His	Asp	Gly	Asp	Val	Ser	Ser	Val	Gly	Gly
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Pro	Leu	Gln	Gly	Pro	Arg	Val	Leu	Gln	Gly	Gly	Leu	Gly	Val	Cys	Glu
			20					25					30		
Gly	Ala	His	Gln	Val	Ala	Ser	Gln	Gln	Gly	Arg	Leu	Pro	Arg	Pro	Glu
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Arg Ala Gly Leu Pro Leu Thr
50 55

<210> 69
<211> 182
<212> PRT
<213> homo sapiens

<400> 69

Ser 1	Val	His	Phe	Pro 5	Ala	Ala	Leu	Arg	Cys 10	Glu	Thr	Ala	Ala	Leu 15	Leu
Trp	Ser	Leu	Arg 20	Ala	Ala	Arg	His	His 25	Asp	Ser	Gln	Arg	Thr 30	Leu	Arg
Arg	Ala	Arg 35	Lys	Thr	Thr	Pro	Ser 40	Arg	Gly	Leu	Cys	Gly 45	Ala	Ala	Thr
Gly	Ser 50	Gly	Gly	Arg	Ala	Glu 55	Cys	Pro	Cys	Ala	Trp 60	Ile	Arg	Ala	Thr
Met 65	Val	Ala	Arg	Val	Trp 70	Ser	Leu	Met	Arg	Phe 75	Leu	Ile	Lys	Gly	Ser 80
Val	Ala	Gly	Gly	Ala 85	Val	Tyr	Leu	Val	Tyr 90	Asp	Gln	Glu	Leu	Leu 95	Gly
Pro	Ser	Asp	Lys 100	Ser	Gln	Ala	Ala	Leu 105	Gln	Lys	Ala	Gly	Glu 110	Val	Val
Pro	Pro	Ala 115	Met	Tyr	Gln	Phe	Ser 120	Gln	Tyr	Val	Cys	Gln 125	Gln	Thr	Gly
Leu	Gln 130	Ile	Pro	Gln	Leu	Pro 135	Ala	Pro	Pro	Lys	Ile 140	Tyr	Phe	Pro	Ile
Arg 145	Asp	Ser	Trp	Asn	Ala 150	Gly	Ile	Met	Thr	Val 155	Met	Ser	Ala	Leu	Ser 160
Val	Ala	Pro	Ser	Lys 165	Ala	Arg	Glu	Tyr	Ser 170	Lys	Glu	Gly	Trp	Glu 175	Tyr
Val	Lys	Ala	Arg 180	Thr	Lys										

<210> 70
<211> 25
<212> PRT
<213> homo sapiens

<400> 70

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Cys	Arg	Pro	Asn	Lys	Gly	Leu	Gln	Lys							
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<210> 71
 <211> 56
 <212> PRT
 <213> homo sapiens
 <400> 71

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Met	Lys	Ser	Val	Leu	Tyr	Glu	Ser	Tyr	Thr	Lys	Met	Gly	Arg	His	Leu
			20					25					30		
Val	Asn	Cys	Ala	Arg	Tyr	Leu	Lys	Cys	Met	Phe	Arg	Lys	Ala	Phe	Tyr
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<210> 72
 <400> 72
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<210> 73
 <211> 291
 <212> PRT
 <213> homo sapiens
 <400> 73

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His	Leu	Lys	Arg	Ile	Ile	Ser	Asp	Leu	Cys	Lys	Leu	Tyr	Asn	Leu	Pro
			20					25					30		
Gln	His	Pro	Asp	Val	Glu	Met	Leu	Asp	Gln	Pro	Leu	Pro	Ala	Glu	Gln
		35					40					45			
Cys	Thr	Gln	Glu	Asp	Val	Ser	Ser	Glu	Asp	Glu	Asp	Glu	Glu	Met	Pro
	50					55					60				
Glu	Asp	Thr	Glu	Asp	Leu	Asp	His	Tyr	Glu	Met	Lys	Glu	Glu	Glu	Pro
65					70					75					80
Ala	Glu	Gly	Lys	Lys	Ser	Glu	Asp	Asp	Gly	Ile	Gly	Lys	Glu	Asn	Leu
				85					90					95	
Ala	Ile	Leu	Glu	Lys	Ile	Lys	Lys	Asn	Gln	Arg	Gln	Asp	Tyr	Leu	Asn
			100					105					110		

Gly	Ala	Val	Ser	Gly	Ser	Val	Gln	Ala	Thr	Asp	Arg	Leu	Met	Lys	Glu
		115					120					125			
Leu	Arg	Asp	Ile	Tyr	Arg	Ser	Gln	Ser	Phe	Lys	Gly	Gly	Asn	Tyr	Ala
	130					135					140				
Val	Glu	Leu	Val	Asn	Asp	Ser	Leu	Tyr	Asp	Trp	Asn	Val	Lys	Leu	Leu
145					150					155					160
Lys	Val	Asp	Gln	Asp	Ser	Ala	Leu	His	Asn	Asp	Leu	Gln	Ile	Leu	Lys
				165					170					175	
Glu	Lys	Glu	Gly	Ala	Asp	Phe	Ile	Leu	Leu	Asn	Phe	Ser	Phe	Lys	Asp
			180					185					190		
Asn	Phe	Pro	Phe	Asp	Pro	Pro	Phe	Val	Arg	Val	Val	Ser	Pro	Val	Leu
		195					200					205			
Ser	Gly	Gly	Tyr	Val	Leu	Gly	Gly	Gly	Ala	Ile	Cys	Met	Glu	Leu	Leu
	210					215					220				
Thr	Lys	Gln	Gly	Trp	Ser	Ser	Ala	Tyr	Ser	Ile	Glu	Ser	Val	Ile	Met
225					230					235					240
Gln	Ile	Ser	Ala	Thr	Leu	Val	Lys	Gly	Lys	Ala	Arg	Val	Gln	Phe	Gly
				245					250					255	
Ala	Asn	Lys	Ser	Gln	Tyr	Ser	Leu	Thr	Arg	Ala	Gln	Gln	Ser	Tyr	Lys
			260					265					270		
Ser	Leu	Val	Gln	Ile	His	Glu	Lys	Asn	Gly	Trp	Tyr	Thr	Pro	Pro	Lys
		275					280					285			
Glu	Asp	Gly													
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Arg	Ser	Val	Val	Arg	Arg	Cys	Leu	Lys	Met	Ala	Ala	Glu	Glu	Pro	Gln
1				5					10					15	
Gln	Gln	Lys	Gln	Glu	Pro	Leu	Gly	Ser	Asp	Ser	Glu	Gly	Val	Asn	Cys
			20					25					30		
Leu	Ala	Tyr	Asp	Glu	Ala	Ile	Met	Ala	Gln	Gln	Asp	Arg	Ile	Gln	Gln
		35					40					45			

Glu	Ile 50	Ala	Val	Gln	Asn	Pro 55	Leu	Val	Ser	Glu	Arg 60	Leu	Glu	Leu	Ser
Val 65	Leu	Tyr	Lys	Glu	Tyr 70	Ala	Glu	Asp	Asp	Asn 75	Ile	Tyr	Gln	Gln	Lys 80
Ile	Lys	Asp	Leu	His 85	Lys	Lys	Tyr	Ser	Tyr 90	Ile	Arg	Lys	Thr	Arg 95	Pro
Asp	Gly	Asn	Cys 100	Phe	Tyr	Arg	Ala	Phe 105	Gly	Phe	Ser	His	Leu 110	Glu	Ala
Leu	Leu	Asp 115	Asp	Ser	Lys	Glu	Leu 120	Gln	Arg	Phe	Lys	Ala 125	Val	Ser	Ala
Lys	Ser 130	Lys	Glu	Asp	Leu	Val 135	Ser	Gln	Gly	Phe	Thr 140	Glu	Phe	Thr	Ile
Glu 145	Asp	Phe	His	Asn	Thr 150	Phe	Met	Asp	Leu	Ile 155	Glu	Gln	Val	Glu	Lys 160
Gln	Thr	Ser	Val	Ala 165	Asp	Leu	Leu	Ala	Ser 170	Phe	Asn	Asp	Gln	Ser 175	Thr
Ser	Asp	Tyr	Leu 180	Val	Val	Tyr	Leu	Arg 185	Leu	Leu	Thr	Ser	Gly 190	Tyr	Leu
Gln	Arg	Glu 195	Ser	Lys	Phe	Phe	Glu 200	His	Phe	Ile	Glu	Gly 205	Gly	Arg	Thr
Val	Lys 210	Glu	Phe	Cys	Gln	Gln 215	Glu	Val	Glu	Pro	Met 220	Cys	Lys	Glu	Ser
Asp 225	His	Ile	His	Ile	Ile 230	Ala	Leu	Ala	Gln	Ala 235	Leu	Ser	Val	Ser	Ile 240
Gln	Val	Glu	Tyr	Met 245	Asp	Arg	Gly	Glu	Gly 250	Gly	Thr	Thr			

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<213> homo sapiens

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Glu 1	Lys	Phe	Leu	Asn 5	Met	Gly	Ala	Pro	Leu 10	Gly	Val	Gly	Leu	Gly 15	Leu
Val	Phe	Val	Ser 20	Ser	Ile	Gly	Ile	Tyr 25	Val	Ser	Ser	Thr	Tyr 30	Pro	Pro

Val	Ala	Gly 35	Ala	Thr	Leu	Tyr	Ser 40	Val	Ala	Met	Tyr	Gly 45	Gly	Leu	Val
Leu	Phe 50	Ser	Met	Phe	Leu	Leu 55	Tyr	Asp	Thr	Gln	Lys 60	Val	Ile	Lys	Arg
Ala 65	Glu	Val	Ser	Pro	Met 70	Tyr	Gly	Val	Gln	Lys 75	Tyr	Asp	Pro	Ile	Asn 80
Ser	Met	Leu	Ser	Ile 85	Tyr	Met	Asp	Thr	Leu 90	Asn	Ile	Phe	Met	Arg 95	Val
Ala	Thr	Met	Leu 100	Ala	Thr	Gly	Gly	Asn 105	Arg	Lys	Lys				

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Met 1	His	Arg	Asp	Ser 5	Cys	Pro	Leu	Asp	Cys 10	Lys	Val	Tyr	Val	Gly 15	Asn
Leu	Gly	Asn	Asn 20	Gly	Asn	Lys	Thr	Glu 25	Leu	Glu	Arg	Ala	Phe 30	Gly	Tyr
Tyr	Gly	Pro 35	Leu	Arg	Ser	Val	Trp 40	Val	Ala	Arg	Asn	Pro 45	Pro	Gly	Phe
Ala	Phe 50	Val	Glu	Phe	Glu	Asp 55	Pro	Arg	Asp	Ala	Ala 60	Asp	Ala	Val	Arg

Glu 65	Leu	Asp	Gly	Arg	Thr 70	Leu	Cys	Gly	Cys	Arg 75	Val	Arg	Val	Glu	Leu 80
Ser	Asn	Gly	Glu	Lys 85	Arg	Ser	Arg	Asn	Arg 90	Gly	Pro	Pro	Pro	Ser 95	Trp
Gly	Arg	Arg	Pro 100	Arg	Asp	Asp	Tyr	Arg 105	Arg	Arg	Ser	Pro	Pro 110	Pro	Arg
Arg	Arg	Ser 115	Pro	Arg	Arg	Arg	Ser 120	Phe	Ser	Arg	Ser	Arg 125	Ser	Arg	Ser
Leu	Ser 130	Arg	Asp	Arg	Arg	Arg 135	Glu	Arg	Ser	Leu	Ser 140	Arg	Glu	Arg	Asn
His 145	Lys	Pro	Ser	Arg	Ser 150	Phe	Ser	Arg	Ser	Arg 155	Ser	Arg	Ser	Arg	Ser 160

Asn Glu Arg Lys

<210> 83

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<212> PRT

<213> homo sapiens

<400> 83

Glu 1	Ala	Ala	Leu	Thr 5	Leu	Cys	His	Leu	Leu 10	Ser	Ser	Trp	Val	Ser 15	Leu
Glu	Ser	Leu	Thr 20	Leu	Ser	Tyr	Asn	Gly 25	Leu	Gly	Ser	Asn	Ile 30	Phe	Arg
Leu	Leu	Asp 35	Ser	Leu	Arg	Ala	Leu 40	Ser	Gly	Gln	Ala	Gly 45	Cys	Arg	Leu
Arg	Ala 50	Leu	His	Leu	Ser	Asp 55	Leu	Phe	Ser	Pro	Leu 60	Pro	Ile	Leu	Glu
Leu 65	Thr	Arg	Ala	Ile	Val 70	Arg	Ala	Leu	Pro	Leu 75	Leu	Arg	Val	Leu	Ser 80
Ile	Arg	Val	Asp	His 85	Pro	Ser	Gln	Arg	Asp 90	Asn	Pro	Gly	Val	Pro 95	Gly
Asn	Ala	Gly	Pro 100	Pro	Ser	His	Ile	Ile 105	Gly	Asp	Glu	Glu	Ile 110	Pro	Glu
Asn	Cys	Leu 115	Glu	Gln	Leu	Glu	Met 120	Xxx	Ile	Ser	Thr	Gly 125	Ser	Pro	Ala

28

Ser	Pro	Thr	Ala	Val	Leu	Arg	Ser	Glu	Gly	Leu	Gly	Phe	Ser	Ala	Ala
	130					135					140				

Ala	Val	Pro	Gly
145			

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Glu	Asp	Gly	Ala	Asp	Gly	Ala	Phe	Tyr	Pro	Asp	Glu	Ile	Gln	Arg	Pro
1				5					10					15	
Pro	Val	Arg	Val	Pro	Ser	Trp	Gly	Leu	Glu	Asp	Asn	Val	Val	Cys	Ser
			20					25					30		
Gln	Pro	Ala	Arg	Asn	Phe	Ser	Arg	Pro	Asp	Gly	Leu	Glu	Asp	Ser	Glu
		35					40					45			
Asp	Ser	Lys	Glu	Asp	Glu	Asn	Val	Pro	Thr	Ala	Pro	Asp	Pro	Pro	Ser
	50					55					60				
Gln	His	Leu	Arg	Gly	His	Gly	Thr	Gly	Phe	Cys	Phe	Asp	Ser	Ser	Phe
65					70					75					80
Asp	Val	His	Lys	Lys	Cys	Pro	Leu	Cys	Glu	Leu	Met	Phe	Pro	Pro	Asn
				85					90					95	
Tyr	Asp	Gln	Ser	Lys	Phe	Glu	Glu	His	Val	Glu	Ser	His	Trp	Lys	Val
			100					105					110		

Cys Pro Met Cys Ser Glu Gln Phe²⁹ Pro Pro Asp Tyr Asp Gln Gln Val
 115 120 125

Phe Glu Arg His Val Gln Thr His Phe Asp Gln Asn Val Leu Asn Phe
 130 135 140

Asp
 145

<210> 91
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<400> 91

Asp Lys Ser Ser Ala Cys Arg Arg Asn Gly Asn Tyr Ser Asp Glu Lys
 1 5 10 15

Lys Asp Ala Met Tyr Trp Glu Lys Arg Arg Lys Asn Asn Glu Ala Ala
 20 25 30

Lys Arg Ser Arg Glu Lys Arg Arg Leu Asn Asp Leu Val Leu Glu Asn
 35 40 45

Lys Leu Ile Ala Leu Gly Glu Glu Asn Ala Thr Leu Lys Ala Glu Leu
 50 55 60

Leu Ser Leu Lys Leu Lys Phe Gly Leu Ile Ser Ser Thr Ala Tyr Ala
 65 70 75 80

Gln Glu Ile Gln Lys Leu Ser Asn Ser Thr Ala Val Tyr Phe Gln Asp
 85 90 95

Tyr Gln Thr Ser Lys Ser Asn Val Ser Ser Phe Val Asp Glu His Glu
 100 105 110

Pro Ser Met Val Ser Ser Ser Cys Ile Ser Val Ile Lys His Ser Pro
 115 120 125

Gln Ser Ser Leu Ser Asp Val Ser Glu Val Ser Ser Val Glu His Thr
 130 135 140

Gln Glu Ser Ser Val Gln Gly Ser Cys Arg Ser Pro Glu Asn Lys Phe
 145 150 155 160

Gln Ile Ile Lys Gln Glu Pro Met Glu Leu Glu Ser Tyr Thr Arg Glu
 165 170 175

Pro Arg Asp Asp Arg Gly Ser Tyr Thr Ala Ser Ile Tyr Gln Asn Tyr
 180 185 190

Met	Gly	Asn 195	Ser	Phe	Ser	Gly	Tyr 200	Ser	His	Ser	Pro	Pro 205	Leu	Leu	Gln
Val	Asn 210	Arg	Ser	Ser	Ser	Asn 215	Ser	Pro	Arg	Thr	Ser 220	Glu	Thr	Asp	Asp
Gly 225	Val	Val	Gly	Lys	Ser 230	Ser	Asp	Gly	Glu	Asp 235	Glu	Gln	Gln	Val	Pro 240
Lys	Gly	Pro	Ile	His 245	Ser	Pro	Val	Glu	Leu 250	Lys	His	Val	His	Ala 255	Thr
Val	Val	Lys	Val 260	Pro	Glu	Val	Asn	Ser 265	Ser	Ala	Leu	Pro	His 270	Lys	Leu
Arg	Ile	Lys 275	Ala	Lys	Ala	Met	Gln 280	Ile	Lys						

<210> 92
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 <212> PRT
 <213> homo sapiens

<400> 92

Met 1	Ala	Ser	Leu	Gly 5	His	Ile	Leu	Val	Phe 10	Cys	Val	Gly	Leu	Leu 15	Thr
Met	Ala	Lys	Ala 20	Glu	Ser	Pro	Lys	Glu 25	His	Asp	Pro	Phe	Thr 30	Tyr	Asp
Tyr	Gln	Ser 35	Leu	Gln	Ile	Gly	Gly 40	Leu	Val	Ile	Ala	Gly 45	Ile	Leu	Phe
Ile	Leu 50	Gly	Ile	Leu	Ile	Val 55	Leu	Ser	Arg	Arg	Cys 60	Arg	Cys	Lys	Phe
Asn 65	Gln	Gln	Gln	Arg	Thr 70	Gly	Glu	Pro	Asp	Glu 75	Glu	Glu	Gly	Thr	Phe 80
Arg	Ser	Ser	Ile	Arg 85	Arg	Leu	Ser	Thr	Arg 90	Arg	Arg				

<210> 93
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<400> 93

Trp 1	Thr	Gly	Thr	Gly 5	Arg	Gly	Ala	Val	Ala 10	Ile	Met	Ala	Asp	Pro 15	Asp
Pro	Arg	Tyr	Pro 20	Arg	Ser	Ser	Ile	Glu 25	Asp	Asp	Phe	Asn	Tyr 30	Gly	Ser

Ser	Val	Ala	Ser	Ala	Thr	Val	His	Ile	Arg	Met	Ala	Phe	Leu	Arg	Lys
		35					40					45			
Val	Tyr	Ser	Ile	Leu	Ser	Leu	Gln	Val	Leu	Leu	Thr	Thr	Val	Thr	Ser
	50					55					60				
Thr	Val	Phe	Leu	Tyr	Phe	Glu	Ser	Val	Arg	Thr	Phe	Val	His	Glu	Ser
65					70					75					80
Pro	Ala	Leu	Ile	Leu	Leu	Phe	Ala	Leu	Gly	Ser	Leu	Gly	Leu	Ile	Phe
				85					90					95	
Ala	Leu	Thr	Leu	Asn	Arg	His	Lys	Tyr	Pro	Leu	Asn	Leu	Tyr	Leu	Leu
			100					105					110		
Phe	Gly	Phe	Thr	Leu	Leu	Glu	Ala	Leu	Thr	Val	Ala	Val	Val	Val	Thr
		115					120					125			
Ser	Met	Met	Tyr	Ile	Leu	Ser	Ala	Ser	Phe	His	Thr				
	130					135					140				

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<210> 95
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<210> 96
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 <213> homo sapiens

<400> 97

Phe	Phe	Pro	Leu	Leu	Leu	Pro	Leu	His	Thr	Pro	Val	Ala	Gly	Arg	Asn
1				5					10					15	
Leu	Gly	Phe	Pro	Glu	Ser	Leu	Gly	Val	Pro	Pro	Phe	Leu	Pro	His	Pro
			20					25					30		
Gly	Gly	Thr	Pro	Arg	Ala	Pro	Gly	Leu	Phe	Leu	Leu	Leu	Phe	Ser	Phe
		35					40					45			
Trp	Ala	Val													
	50														

<210> 98
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 <212> PRT
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<400> 98

Phe 1	Phe	Leu	Tyr	Ser 5	Phe	Pro	Phe	Thr	Pro 10	Pro	Trp	Leu	Glu	Gly 15	Thr
Ser	Ala	Ser	Leu 20	Lys	Ala	Trp	Gly	Ser 25	His	Pro	Ser	Tyr	Pro 30	Thr	Arg
Glu	Glu	Arg 35	Pro	Gly	Pro	Arg	Ala 40	Cys	Phe	Ser	Ser	Cys 45	Phe	Pro	Phe
Gly	Gln 50	Phe	Asp	His											

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<212> PRT

<213> homo sapiens

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Pro 1	Leu	Asp	Cys	Ala 5	Thr	Phe	Val	Phe	Val 10	Phe	Leu	Asn	Phe	Phe 15	Lys
Pro	Arg	Met	Ile 20	Ser	Pro	Ala	Ser	Phe 25	Ser	Ser	Pro	Ser	Ser 30	Gln	Thr
Glu	Phe	Lys 35	Gly	His	Phe	Ser	Ser 40	Ser	Phe	Trp	His	Leu 45	Gln	Pro	Gln
Ser	Gly 50	Ile	Phe												

<210> 100

<211> 122

<212> PRT

<213> homo sapiens

<400> 100

Pro 1	Phe	Ser	Ser	Ser 5	Val	Ser	Phe	Phe	Gly 10	Thr	Ala	Pro	Ser	Cys 15	Leu
Leu	Glu	Gly	Trp 20	Ile	Leu	Val	Cys	Ala 25	Leu	Asp	Arg	Tyr	Arg 30	Ile	Asn
Thr	Cys	Ala 35	Leu	Arg	Thr	Gly	Ser 40	Pro	Arg	Phe	Ile	Gln 45	Ser	Ala	His
Tyr	Arg 50	Lys	Leu	Leu	Cys	Gln 55	Asn	Pro	Gly	Lys	Asp 60	Pro	Thr	Pro	Gly
Ser 65	Pro	Ser	Ser	Leu	Leu 70	Thr	Ser	Thr	Arg	Ala 75	Val	Leu	Leu	Phe	Phe 80
Ile	Leu	Leu	Phe	Tyr	Cys	Phe	Cys	Cys	Gly	His	Tyr	His	Trp	Gln	Ser

Ser	Phe	Ser	Pro	Phe	Leu	Asp	Ile	Gly	Val	Leu	Ser	Leu	Lys	Asp	Ser
			100					105					110		

Thr	Leu	Arg	Leu	Lys	Val	Pro	Lys	Ala	Ala
		115					120		

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 <212> PRT
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<400> 101

Leu	Phe	Phe	Phe	Cys	Phe	Leu	Phe	Trp	Asp	Cys	Ala	Ile	Met	Phe	Ile
1				5					10					15	

Arg	Arg	Leu	Asp	Phe	Gly	Val	Cys	Ser	Arg	Gln	Ile	Gln	Asn	Lys	Tyr
			20					25					30		

Leu	Arg	Leu	Glu	Asn	Arg	Lys	Ser	Thr	Ile	His	Thr	Lys	Cys	Ser	Leu
		35					40					45			

Gln	Glu	Val	Ala	Val	Ser	Lys	Ser	Arg	Gln	Gly	Pro	Asn	Ser	Gly	Gln
	50					55					60				

Pro	Leu	Leu	Pro	Ala	Asp	Leu	Asn	Lys	Gly	Cys	Ala	Ile	Val	Phe	Tyr
65					70					75					80

Phe	Ile	Ile	Leu	Leu	Leu	Leu	Leu	Trp	Ser	Leu	Ser	Leu	Ala	Lys	Phe
				85					90					95	

Leu	Phe	Pro	Phe	Pro	Gly	His	Arg	Gly	Pro	Val	Phe	Lys	Arg	Phe	His
			100					105					110		

Ser	Glu	Ala	Glu	Gly	Ala	Lys	Ser	Cys	Leu	Arg	Ser	Gly	Leu
		115					120					125	

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<400> 102

Ile	Asp	Phe	Glu	Gly	Lys	Glu	Arg	Gly	Lys	Gly	Gln	Gly	Arg	Asp	Thr
1				5					10					15	

Pro	Pro	Leu	Pro	Leu	Ser	Trp	Ala	Gln	Lys	Leu	Gly	Gly	Gly	Arg	Glu
			20					25					30		

Arg	Ile	Phe	Thr	Phe	Phe	Lys	Leu	Leu	Phe	Ser	Glu	Trp	Asn	Lys	Leu
		35					40					45			

Gly	Gln	Gly	Ala	Gln	Ala	Leu	Ser	Ser	Val	Pro	His	Thr	Pro	Leu	Leu
	50					55					60				

Arg	Ser	Phe	Ile	Gln	Lys	Asn	Ile	Ser
65					70			

<210> 103
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 <212> PRT
 <213> homo sapiens

<400> 103

Ile	Leu	Arg	Gly	Arg	Arg	Glu	Gly	Arg	Val	Arg	Val	Glu	Thr	Pro	Leu
1				5					10					15	
Pro	Cys	Pro	Phe	Pro	Gly	Pro	Arg	Ser	Trp	Gly	Glu	Gly	Gly	Lys	Gly
			20					25					30		
Phe	Leu	His	Phe	Leu	Asn	Cys	Tyr	Phe	Leu	Asn	Gly	Thr	Ser	Trp	Ala
		35					40					45			
Lys	Gly	Pro	Arg	Pro	Cys	Pro	Leu	Ser	Leu	Thr	Pro	Leu	Cys	Ser	Val
	50					55					60				
His	Ser	Phe	Lys	Lys	Thr	Phe	Leu	Glu	His	Leu	Leu	Cys	Pro	Ala	Tyr
65					70					75					80
Ala	Arg	Pro	Thr	Ser	Val	Cys	Val	Gly	Gly	Leu	Tyr	Ala	Ser	Ser	Ser
				85					90					95	
Val	Pro	Pro	Cys	Pro	Ser	Phe	Thr	Gly	Ala	Phe	Gly	Gly	Ser	Val	Gly
			100					105					110		
Gly	Gly	Thr	Phe	Cys	Gly	Val	Trp	Gly	Ser	Pro	Gly	Ser	Pro	Thr	Lys
		115					120					125			
Leu	Ser	Pro	Ser	Pro	Val	Pro	Thr	His	Leu	Leu	Gln	Pro	Pro	Ala	
	130					135					140				

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<400> 104

Cys	Arg	Pro	Thr	Ile	Phe	Thr	Pro	Arg	Pro	Pro	Ala	Leu	Gly	Glu	Gly
1				5					10					15	
Ser	Thr	Thr	Thr	Ser	Pro	Leu	Asp	Ile	Pro	Leu	Gly	Thr	Gly	Met	Trp
			20					25					30		
Val	Pro	Leu	Thr	Val	Arg	Pro	Trp	Gly	Glu	Pro	Lys	Ala	Leu	Thr	Ser
		35					40					45			

Gly	Ile	Ala	Met	Leu	Gly	Gly	Gly	Ala	Ser	Glu	Thr	Val	Gly	Arg	Gln
	50					55					60				

Asp	Ile	Leu	Gly	Ala	Ala	Pro	Ser	Gln	Gln	Gly	Ile	Arg	Gln	Gly	Ala
65					70					75					80

Val	Gly	Asp	Gly	Leu	Ala	Gln	Gly	Lys	Gly	Thr	Ala	Trp	Ser	Gly	Phe
				85					90					95	

Leu	Glu	Ile	Pro	Lys	Pro	His	Arg	Arg	Ser	His	Leu	Leu	Gln	Ile	Pro
			100					105					110		

Gln	Arg	His	Arg
		115	

<210> 105

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<212> PRT

<213> homo sapiens

<400> 105

Arg	Met	Gly	Lys	Glu	Ala	Leu	Met	Ser	Trp	Arg	Arg	Asp	Pro	Pro	His
1				5					10					15	

Thr	Leu	Ser	Trp	Trp	Ala
			20		

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<210> 107

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<210> 108

<400> 108

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<210> 109

<211> 165

<212> PRT

<213> homo sapiens

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Gly	Ala	Gly	Pro	Trp	Glu	Ala	Phe	Pro	Asp	Gly	Ile	Gly	Arg	Arg	Ser
1				5					10					15	

Arg	Arg	Ala	Arg	Leu	Pro	Gln	Tyr	Lys	Arg	Pro	Pro	Gly	Gly	Gly	Gly
			20					25					30		

Gly	Gly	Asp	Ser	Gly	Arg	Arg	Asn	Met	Ala	Val	Ala	Asp	Leu	Ala	Leu
		35					40					45			

Ile	Pro	Asp	Val	Asp	Ile	Asp	Ser	Asp	Gly	Val	Phe	Lys	Tyr	Val	Leu
	50					55					60				

Ile 65	Arg	Val	His	Ser	Ala 70	Pro	Arg	Ser	Gly	Ala 75	Pro	Ala	Ala	Glu	Ser 80
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Lys	Glu	Ile	Val	Arg 95	Gly	Tyr	Lys	Trp	Ala 90	Glu	Tyr	His	Ala	Asp 95	Ile
-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----

Tyr	Asp	Lys	Val 100	Ser	Gly	Asp	Met	Gln 105	Lys	Gln	Gly	Cys	Asp 110	Cys	Glu
-----	-----	-----	------------	-----	-----	-----	-----	------------	-----	-----	-----	-----	------------	-----	-----

Cys	Leu	Gly 115	Gly	Gly	Arg	Ile	Ser 120	His	Gln	Ser	Gln	Asp 125	Lys	Lys	Ile
-----	-----	------------	-----	-----	-----	-----	------------	-----	-----	-----	-----	------------	-----	-----	-----

His	Val 130	Tyr	Gly	Tyr	Ser	Met 135	Ala	Tyr	Gly	Pro	Ala 140	Gln	His	Ala	Ile
-----	------------	-----	-----	-----	-----	------------	-----	-----	-----	-----	------------	-----	-----	-----	-----

Ser 145	Thr	Glu	Lys	Ile	Lys 150	Ala	Lys	Tyr	Pro	Asp 155	Tyr	Glu	Val	Thr	Trp 160
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Ala	Asn	Asp	Gly	Tyr 165
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<210> 111
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<212> PRT
<213> homo sapiens

<400> 111

Pro 1	Ser	Ser	Pro	Ser 5	Leu	Pro	Val	Leu	Arg 10	Ala	Gly	Leu	Arg	Pro 15	Phe
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Cys	Asp	Val	Leu 20	Pro	Gly	Cys	Gly	Cys 25	Val	Arg	Phe	Leu	Cys 30	Ser	Cys
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Leu

<210> 112
<211> 31
<212> PRT
<213> homo sapiens

<400> 112

Glu 1	Thr	Cys	Ala	Gly 5	Ala	Gly	Arg	Cys	Ala 10	Ala	Asp	Gly	Gly	Asn 15	Gly
----------	-----	-----	-----	----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----

Ser	Gly	Ser	Arg 20	Val	Pro	Pro	Ala	Ser 25	Arg	Cys	Cys	Ala	Leu 30	Gly
-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----

<210> 113
<211> 67
<212> PRT

<213> homo sapiens

<400> 113

Lys 1	Arg	Ala	Gln	Ala 5	Pro	Ala	Ala	Ala	Leu 10	Gln	Met	Ala	Glu	Met 15	Asp
Pro	Val	Ala	Glu 20	Phe	Pro	Gln	Pro	Pro 25	Gly	Ala	Ala	Arg	Trp 30	Ala	Glu
Ala	Leu	Leu 35	Arg	Cys	Phe	Thr	Trp 40	Leu	Arg	Leu	Cys	Gln 45	Ile	Ser	Met
Phe	Leu 50	Ser	Leu	Lys	Cys	Leu 55	Asn	Thr	Arg	Ser	Ser 60	His	Leu	Gly	Ala
His 65	Cys	Arg													

<210> 114

<211> 246

<212> PRT

<213> homo sapiens

<400> 114

Gly 1	Cys	Val	Ala	Gly 5	Ser	Ala	Gly	Leu	Ser 10	Arg	Lys	Ser	Pro	Trp 15	Thr
Glu	Val	Glu	Thr 20	Glu	Thr	Phe	Leu	Gly 25	Ser	Pro	Arg	Tyr	Ser 30	Arg	Arg
Val	Arg	Ser 35	Cys	Tyr	Trp	Leu	Leu 40	Gly	Leu	Met	Ala	Val 45	Arg	Ala	Ser
Phe	Glu 50	Asn	Asn	Cys	Glu	Ile 55	Gly	Cys	Phe	Ala	Lys 60	Leu	Thr	Asn	Thr
Tyr 65	Cys	Leu	Val	Ala	Ile 70	Gly	Gly	Ser	Glu	Asn 75	Phe	Tyr	Ser	Val	Phe 80
Glu	Gly	Glu	Leu	Ser 85	Asp	Thr	Ile	Pro	Val 90	Val	His	Ala	Ser	Ile 95	Ala
Gly	Cys	Arg	Ile 100	Ile	Gly	Arg	Met	Cys 105	Val	Gly	Asn	Arg	His 110	Gly	Leu
Leu	Val	Pro 115	Asn	Asn	Thr	Thr	Asp 120	Gln	Glu	Leu	Gln	His 125	Ile	Arg	Asn
Ser	Leu 130	Pro	Asp	Thr	Val	Gln 135	Ile	Arg	Arg	Val	Glu 140	Glu	Arg	Leu	Ser
Ala	Leu	Gly	Asn	Val	Thr	Thr	Cys	Asn	Asp	Tyr	Val	Ala	Leu	Val	His

145					150						155				160
Pro	Asp	Leu	Asp	Arg 165	Glu	Thr	Glu	Glu	Ile 170	Leu	Ala	Asp	Val	Leu 175	Lys
Val	Glu	Val	Phe 180	Arg	Gln	Thr	Val	Ala 185	Asp	Gln	Val	Leu	Val 190	Gly	Ser
Tyr	Cys	Val 195	Phe	Ser	Asn	Gln	Gly 200	Gly	Leu	Val	His	Pro 205	Lys	Thr	Ser
Ile	Glu 210	Asp	Gln	Asp	Glu	Cys 215	Leu	Ser	Phe	Gln	Val 220	Pro	Cys	Cys	Gly
Asp 225	Val	Asn	Glu	Ala	Leu 230	Ser	Asp	Ser	Trp	Asp 235	Val	Tyr	Asn	Val	Ser 240
Phe	Val	Pro	Glu	Thr 245	Thr										

<210> 115

<400> 115

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<210> 116

<211> 72

<212> PRT

<213> homo sapiens

<400> 116

Met 1	Gly	Tyr	Asn	Leu 5	Ser	Pro	Gln	Phe	Thr 10	Gln	Leu	Leu	Val	Ser 15	Arg
Tyr	Cys	Pro	Arg 20	Ser	Ala	Asn	Pro	Ala 25	Met	Gln	Leu	Asp	Arg 30	Phe	Ile
Gln	Val	Cys 35	Thr	Gln	Leu	Gln	Val 40	Leu	Thr	Glu	Ala	Phe 45	Arg	Glu	Lys
Asp	Thr 50	Ala	Val	Gln	Gly	Asn 55	Ile	Arg	Leu	Ser	Phe 60	Glu	Asp	Phe	Val
Thr 65	Met	Thr	Ala	Ser	Arg 70	Met	Leu								

<210> 117

<211> 35

<212> PRT

<213> homo sapiens

<400> 117

Glu 1	His	Thr	His	Arg 5	Cys	Ser	Asp	Gln	Leu 10	Arg	Leu	Ala	Thr	Val 15	Ser
----------	-----	-----	-----	----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----

Asn Ser Val Ala Ser Lys Arg Glu Val Tyr Leu Cys Pro Ala Ile Gly
 20 25 30 39

His Leu Gly
 35

<210> 113
 <211> 40
 <212> PRT
 <213> homo sapiens

<400> 113

Ala Thr Leu Trp Leu Ala Lys Glu Lys Phe Ile Cys Ala Gln Pro Leu
 1 5 10 15
 Val Thr Leu Gly Asp Ala Pro Asp Ser Arg Gln Met Leu Val His Trp
 20 25 30
 Pro Ser Ser Ser Phe Leu Leu Lys
 35 40

<210> 119
 <211> 33
 <212> PRT
 <213> homo sapiens

<400> 119

Gln Lys Arg Ser Leu Phe Val Pro Ser His Trp Ser Pro Trp Val Met
 1 5 10 15
 His Gln Ile Ala Gly Arg Cys Trp Phe Ile Gly Leu Arg Pro Leu Ser
 20 25 30

Ser

<210> 120
 <211> 161
 <212> PRT
 <213> homo sapiens

<400> 120

Leu Ser Ser Ser Arg Ser Phe Ile Ser Thr Ser Trp Gly Ala Phe Val
 1 5 10 15
 Phe Phe Cys Leu Leu Ser Cys Gly Ser Leu Val Leu Ala Gly Phe Glu
 20 25 30
 Gly Ala Ser Thr Ser Met Ala Val Phe Ser Phe Trp Ala Ser Arg Ile
 35 40 45
 Cys Trp Arg Ser Phe Leu Arg Phe Phe Pro Asp Ser Val Met Leu Ala
 50 55 60
 Arg Ala Leu Asp Ala Arg Phe Leu Arg Trp Cys Arg Val Ile Ser Pro
 65 70 75 80

Trp	Ser	Ile	Thr	Ala 85	Pro	Thr	Thr	Arg	Cys 90	Leu	Arg	Arg	Arg	Ser 95	Arg
Phe	Asn	Thr	Arg 100	Arg	Arg	Leu	Asn	Ser 105	Phe	Phe	Phe	Ser	Ser 110	Val	Arg
Gly	Arg	Leu 115	Ile	Phe	Pro	Pro	Gly 120	Ala	Pro	Ile	Val	Ala 125	Ile	Pro	Leu
Gln	Phe 130	Thr	Val	Arg	Thr	Ser 135	Ala	Gln	Arg	Arg	Ile 140	Arg	Gly	Leu	Arg
Pro 145	Gly	Leu	Pro	Arg	Ala 150	Asn	Arg	Asn	Ser	Gly 155	Ala	Gly	Pro	Arg	Ala 160

Ile

<210> 121
 <211> 49
 <212> PRT
 <213> homo sapiens

<400> 121

Phe 1	Phe	Gln	Ser	Ala 5	Arg	Ala	Leu	Leu	Gln 10	Met	Glu	Leu	Thr	Ala 15	Arg
Glu	Ala	Leu	Leu 20	Gln	Ser	Phe	Phe	Cys 25	Thr	Phe	Phe	Pro	Pro 30	Lys	Asp
Ile	Pro	Leu 35	Gly	Glu	Val	Ser	Arg 40	Pro	Leu	Gly	Arg	Arg 45	Lys	Ser	Gly

Glu

<210> 122
 <211> 25
 <212> PRT
 <213> homo sapiens

<400> 122

Lys 1	Gly	Ala	Leu	Leu 5	Leu	Ser	Lys	Ser	Ser 10	Glu	Thr	Thr	Thr	Glu 15	Ser
Glu	Gly	Trp	Leu 20	Gln	Leu	Arg	Ile	Phe 25							

<210> 123
 <211> 25
 <212> PRT
 <213> homo sapiens

<400> 123

Trp 1	Lys	Arg	Phe	Ser 5	Ser	His	Leu	Gln	Gly 10	Pro	Ser	Phe	Leu	His 15	Pro
----------	-----	-----	-----	----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----

Gly Gly Leu Leu Ser Ser Phe Ala Phe
20 25

<210> 124
<211> 160
<212> PRT
<213> homo sapiens

<400> 124

Trp 1	Leu	Leu	Gln	Leu 5	Lys	Pro	His	Leu	Leu 10	Ala	His	His	Pro	Pro 15	Lys
Gly	Leu	Pro	His 20	Arg	Gly	Ala	Pro	Leu 25	Tyr	Ser	Pro	Arg	Thr 30	Arg	Pro
Arg	Val	Ala 35	Ile	Gly	Pro	Arg	Lys 40	Ala	Gly	Ala	Glu	Pro 45	Ala	Asp	Pro
Ala	Leu 50	Ser	Gly	Ser	Thr	Asp 55	Arg	Glu	Leu	Glu	Trp 60	Asn	Arg	Asp	Tyr
Gly 65	Ser	Ser	Gly	Gly	Lys 70	Asp	Gln	Pro	Ala	Pro 75	Asn	Gly	Ala	Glu	Glu 80
Glu	Ala	Val	Gln	Thr 85	Pro	Ala	Gly	Val	Glu 90	Ser	Gly	Ala	Ala	Ser 95	Glu
Ala	Pro	Gly	Gly 100	Arg	Gly	Cys	Asp	Arg 105	Pro	Arg	Ala	Asp	His 110	Ala	Ala
Pro	Pro	Gln 115	Glu	Ala	Gly	Val	Gln 120	Cys	Thr	Cys	Gln	His 125	Tyr	Thr	Val
Arg	Glu 130	Glu	Ala	Gln	Lys	Thr 135	Pro	Pro	Ala	Asp	Pro 140	Ala	Cys	Pro	Glu
Arg 145	Glu	Asp	Ser	His	Gly 150	Ser	Gly	Ser	Pro	Phe 155	Lys	Ala	Ser	Gln	Asp 160

<210> 125
<400> 125
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<210> 126
<400> 126
000

<210> 127
<400> 127
000

<210> 128
<211> 78

<212> PRT
 <213> homo sapiens

<400> 123

Phe 1	Phe	Phe	Pro	Cys 5	Gln	Pro	Phe	Ile	Gly 10	Ser	Gly	Thr	His	Glu 15	Val
Gln	Leu	Val	Pro 20	Gly	Thr	Val	His	Ser 25	Leu	Lys	Gln	Leu	Lys 30	Gly	Leu
Ser	Pro	Asp 35	Thr	Asp	Ala	Thr	Leu 40	Ser	Arg	Met	His	Gly 45	Pro	Gly	Leu
Thr	Leu 50	Ser	Met	Glu	Glu	Val 55	Gly	Ser	Ala	Arg	Gly 60	Gly	Arg	Met	Val
Ala 65	Arg	Asp	Thr	Glu	Ser 70	Leu	Val	Leu	Gly	Leu 75	Trp	Leu	Ser		

<210> 129
 <211> 109
 <212> PRT
 <213> homo sapiens

<400> 129

Cys 1	Ala	Leu	Leu	Pro 5	Pro	Thr	Pro	Ser	Arg 10	Thr	Glu	Pro	Ser	Leu 15	His
Ser	Thr	Gly	Asp 20	Ser	Gly	Lys	Gly	Ala 25	Glu	Asp	Arg	Gln	Glu 30	Ala	His
Arg	Asp	Arg 35	Pro	Thr	Gly	Ser	Gln 40	Ala	Ala	Pro	Glu	Glu 45	Arg	Asp	Ile
Gln	Thr 50	Glu	Glu	Ser	Leu	Pro 55	Ala	Pro	His	Ser	Phe 60	Gln	Asp	Glu	Lys
Asn 65	Leu	Pro	Pro	Pro 70	Pro	Asp	Thr	Asp	Ala	Arg 75	Glu	Val	Gly	Gly	Arg 80
Ser	Gly	Lys	Phe	Pro 85	Phe	Pro	Val	Pro	Pro 90	Arg	Thr	Ser	Glu	Pro 95	Ser
Met	Leu	Asn	Phe 100	Phe	Phe	Ile	Lys	Ile 105	Thr	Phe	Ile	Leu			

<210> 130
 <211> 102
 <212> PRT
 <213> homo sapiens

<400> 130

Ser	Leu	Pro	Ala	Asp	Val	Pro	Cys	Cys	Pro	Pro	Pro	His	Pro	Ala	Gln
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

1				5			43		10				15		
Asn	His	Pro	Cys 20	Ile	Pro	Gln	Gly	Thr 25	Arg	Ala	Arg	Val	Pro 30	Lys	Ile
Asp	Lys	Arg 35	His	Thr	Glu	Thr	Asp 40	Gln	Leu	Ala	Ala	Arg 45	Gln	Pro	Gln
Arg	Arg 50	Glu	Thr	Phe	Arg	Gln 55	Arg	Lys	Val	Ser	Leu 60	Pro	Leu	Ile	Pro
Ser 65	Lys	Met	Arg	Lys	Thr 70	Cys	Arg	His	Pro	Pro 75	Thr	Leu	Met	Pro	Gly 80
Arg	Trp	Glu	Glu	Glu 85	Val	Gly	Asn	Phe	Pro 90	Ser	Gln	Tyr	Pro	Gln 95	Glu
Arg	Leu	Ser	Leu 100	Gln	Cys										

<210> 131
 <211> 31
 <212> PRT
 <213> homo sapiens

<400> 131

Leu 1	Cys	Gln	Leu	Met 5	Cys	Pro	Val	Ala	Pro 10	His	Pro	Ile	Pro	His 15	Arg
Thr	Ile	Pro	Ala 20	Phe	His	Arg	Gly	Leu 25	Gly	Gln	Gly	Cys	Arg 30	Arg	

<210> 132
 <211> 166
 <212> PRT
 <213> homo sapiens

<400> 132

Gly 1	Phe	Arg	Pro	Ala 5	Arg	Cys	Asp	Pro	Val 10	Pro	Leu	Pro	Thr	Thr 15	Arg
Ser	Val	Ala	Gly 20	Leu	Pro	Val	Gly	Arg 25	Val	Arg	Gln	Leu	Ser 30	Arg	Pro
Leu	Leu	Gly 35	Pro	Asp	Thr	Gly	Ser 40	Val	Ala	Asn	Ile	Phe 45	Lys	Gly	Leu
Val	Ile 50	Leu	Pro	Glu	Met	Ser 55	Leu	Val	Ile	Arg	Asn 60	Leu	Gln	Arg	Val
Ile 65	Pro	Ile	Arg	Arg	Ala 70	Pro	Leu	Arg	Ser	Lys 75	Ile	Glu	Ile	Val	Arg 80
Arg	Ile	Leu	Gly	Val	Gln	Lys	Phe	Asp	Leu	Gly	Ile	Ile	Cys	Val	Asp

Asn	Lys	Asn	Ile 100	Gln	His	Ile	Asn	Arg 105	Ile	Tyr	Arg	Asp	Arg 110	Asn	Val
Pro	Thr	Asp 115	Val	Leu	Ser	Phe	Pro 120	Phe	His	Glu	His	Leu 125	Lys	Ala	Gly
Glu	Phe 130	Pro	Gln	Pro	Asp	Phe 135	Pro	Asp	Asp	Tyr	Asn 140	Leu	Gly	Asp	Ile
Phe 145	Leu	Gly	Val	Glu	Tyr 150	Ile	Phe	His	Gln	Cys 155	Arg	Glu	Asp	Glu	Asp 160
Tyr	Asn	Asp	Val	Leu 165	Thr										

<210> 133

<211> 244

<212> PRT

<213> homo sapiens

<400> 133

Phe 1	Asp	Pro	Lys	Leu 5	Leu	Glu	Gly	Lys	Val 10	Lys	Glu	Asp	Pro	Asp 15	Gln
Gly	Glu	Ser	Met 20	Lys	Pro	Leu	Thr	Phe 25	Ala	Arg	Phe	Tyr	Leu 30	Pro	Ile
Leu	Val	Pro 35	Ser	Ala	Lys	Lys	Ala 40	Ile	Tyr	Met	Asp	Asp 45	Asp	Val	Ile
Val	Gln 50	Gly	Asp	Ile	Leu	Ala 55	Leu	Tyr	Asn	Thr	Ala 60	Leu	Lys	Pro	Gly
His 65	Ala	Ala	Ala	Phe	Ser 70	Glu	Asp	Cys	Asp	Ser 75	Ala	Ser	Thr	Lys	Val 80
Val	Ile	Arg	Gly	Ala 85	Gly	Asn	Gln	Tyr	Asn 90	Tyr	Ile	Gly	Tyr	Leu 95	Asp
Tyr	Lys	Lys	Glu 100	Arg	Ile	Arg	Lys	Leu 105	Ser	Met	Lys	Ala	Ser 110	Thr	Cys
Ser	Phe	Asn 115	Pro	Gly	Val	Phe	Val 120	Ala	Asn	Leu	Thr	Glu 125	Trp	Lys	Arg
Gln	Asn 130	Ile	Thr	Asn	Gln	Leu 135	Glu	Lys	Trp	Met	Lys 140	Leu	Asn	Val	Glu
Glu	Gly	Leu	Tyr	Ser	Arg	Thr	Leu	Ala	Gly	Ser	Ile	Thr	Thr	Pro	Pro

145					150					155				160	
Leu	Leu	Ile	Val	Phe 165	Tyr	Gln	Gln	His	Ser 170	Thr	Ile	Asp	Pro	Met 175	Trp
Asn	Val	Arg	His 180	Leu	Gly	Ser	Ser	Ala 185	Gly	Lys	Arg	Tyr	Ser 190	Pro	Gln
Phe	Val	Lys 195	Ala	Ala	Lys	Leu	Leu 200	His	Trp	Asn	Gly	His 205	Leu	Lys	Pro
Trp	Gly 210	Arg	Thr	Ala	Ser	Tyr 215	Thr	Asp	Val	Trp	Glu 220	Lys	Trp	Tyr	Ile
Pro 225	Asp	Pro	Thr	Gly	Lys 230	Phe	Asn	Leu	Ile	Arg 235	Arg	Tyr	Thr	Glu	Ile 240
Ser	Asn	Ile	Lys												

<210> 134
 <211> 63
 <212> PRT
 <213> homo sapiens
 <400> 134

Pro 1	Ser	Phe	Ile	Ile 5	His	Ser	Asn	Pro	Ile 10	Trp	Leu	Gly	Ala	Leu 15	Leu
Trp	Val	Ser	His 20	Cys	Pro	Ser	Ser	Ile 25	Leu	Gly	Ser	Leu	Arg 30	Pro	Arg
Gly	Gly	Lys 35	Ile	Gln	Leu	Arg	Val 40	Gly	Gly	Ser	Glu	Pro 45	Cys	Arg	Ile
Met	Lys 50	Ala	Thr	Cys	Phe	Gly 55	Asn	Asp	Leu	Pro	Leu 60	Pro	Val	Val	

<210> 135
 <211> 69
 <212> PRT
 <213> homo sapiens
 <400> 135

Asp 1	Tyr	Leu	Arg	Leu 5	Ser	Ser	Gly	Phe	Cys 10	Gln	Asn	Thr	Pro	Leu 15	Thr
Glu	Ser	Thr	Glu 20	Gly	Met	Gly	Val	Gly 25	Gly	Leu	Gly	Arg	Val 30	Arg	Leu
Glu	Cys	Glu 35	Gly	Ser	Leu	Ile	Tyr 40	Ala	Glu	Leu	Lys	Ser 45	Pro	Ser	Leu
Tyr	Val	His	Thr	Phe	Val	Leu	Phe	Ser	Arg	Leu	Ile	Leu	Ala	Ile	Pro

Asn Pro Leu Pro Arg
65

<210> 136
<211> 47
<212> PRT
<213> homo sapiens

<400> 136

Gln	Pro	Phe	Arg	Tyr	Phe	Asn	Thr	Pro	Leu	Ser	Ile	Leu	His	Phe	Pro
1				5					10					15	
His	Leu	Ser	Lys	Leu	Asn	Leu	Val	His	Arg	Val	Gly	Leu	Cys	Met	Cys
			20					25					30		
Met	Gln	Glu	Val	Gly	Val	Asp	Ser	Ala	Leu	Gly	Trp	Asn	Pro	Pro	
		35					40					45			

<210> 137
<211> 83
<212> PRT
<213> homo sapiens

<400> 137

Val	Pro	Pro	Cys	Pro	Gln	Leu	Arg	Glu	Leu	Cys	Pro	Gly	Val	Asn	Asn
1				5					10					15	
Gln	Pro	Tyr	Leu	Cys	Glu	Ser	Gly	His	Cys	Cys	Gly	Glu	Thr	Gly	Cys
			20					25					30		
Cys	Thr	Tyr	Tyr	Tyr	Glu	Leu	Trp	Trp	Phe	Trp	Leu	Leu	Trp	Thr	Val
		35					40					45			
Leu	Ile	Leu	Phe	Ser	Cys	Cys	Cys	Ala	Phe	Arg	His	Arg	Arg	Ala	Lys
	50					55					60				
Leu	Arg	Leu	Gln	Gln	Gln	Gln	Arg	His	Val	Glu	Ile	Asn	Leu	Leu	Ala
65					70					75					80

Tyr His Gly

<210> 138
<400> 138
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<210> 139
<211> 88
<212> PRT
<213> homo sapiens

<400> 139

Trp	Lys	Ser	Trp	Gln	Leu	His	Arg	Met	Leu	Leu	Thr	Arg	Thr	Glu	Phe
1				5					10					15	

Asn Ser Phe Leu Thr Gln Met Met Val Leu Gln Asn Asn Lys Met Ala
1 5 10 15
Glu His Phe His Lys

20

<210> 143
 <211> 44
 <212> PRT
 <213> homo sapiens

<400> 143

Ser	Val	Thr	Lys	Ser	Gly	Phe	Leu	Ile	Pro	Cys	His	Leu	Gly	Asp	Phe
1				5					10					15	
Ile	Leu	Leu	Cys	Cys	Phe	Lys	Ile	Gln	Cys	Arg	Glu	Val	Val	Asp	Cys
			20					25					30		
Arg	Gly	Asn	Lys	Val	Asn	Ser	Asn	Phe	Glu	Lys	Lys				
		35					40								

<210> 144
 <211> 67
 <212> PRT
 <213> homo sapiens

<400> 144

Asn	Pro	Pro	Asn	Asp	Lys	Val	Ser	Glu	Ile	Gln	Thr	Ser	Leu	His	Ser
1				5					10					15	
Ile	Cys	Glu	Asn	Val	Gln	Pro	Phe	Tyr	Cys	Ser	Val	Lys	Glu	Pro	Ser
			20					25					30		
Ser	Gly	Ser	Lys	Met	Asn	Ser	Ile	Asn	Gln	Arg	Ile	Phe	Tyr	Thr	Leu
		35					40					45			
Glu	Lys	Lys	Ile	Ser	Ser	Asn	Ile	Leu	Thr	Glu	Tyr	Cys	Lys	Leu	His
	50					55					60				
Phe	Ser	Ser													
65															

<210> 145
 <211> 65
 <212> PRT
 <213> homo sapiens

<400> 145

Lys	Val	His	Thr	Ile	Leu	His	Phe	Ser	Thr	Lys	Ser	Ser	Gly	Val	Leu
1				5					10					15	
Cys	Leu	Leu	Tyr	Lys	Lys	Lys	Leu	Tyr	Pro	Val	Ala	Gly	Lys	Thr	Leu
			20					25					30		
Ser	Leu	Ser	Leu	Leu	Leu	Asn	Asn	Trp	Arg	Lys	Cys	Ser	Ser	Leu	Tyr
		35					40					45			
Lys	Val	Ala	Tyr	Lys	Leu	Glu	Ser	Glu	Leu	Val	Gln	Ser	Pro	Phe	Thr
	50					55					60				

Phe
55

<210> 146
<211> 55
<212> PRT
<213> homo sapiens

<400> 146

Lys 1	Ile	Trp	Ser	Arg 5	Glu	Gln	Asn	His	Cys 10	Glu	Trp	Met	Asn	Cys 15	Cys
Lys	Met	Lys	Lys 20	Val	Gln	Ala	Lys	Leu 25	Leu	Gln	Val	Phe	Cys 30	His	Phe
Asp	Glu	Ser 35	Gln	Lys	Met	Asn	Phe 40	Gly	Tyr	Leu	Ser	Thr 45	Leu	Arg	Val
Phe	Ser 50	Leu	Ile	Phe	Cys	Met 55									

<210> 147
<211> 113
<212> PRT
<213> homo sapiens

<400> 147

Ile 1	Pro	Glu	Asp	Pro 5	His	Ile	Asp	Glu	Ser 10	Lys	Ala	Lys	His	Gln 15	Ala
Ile	Ile	Met	Ser 20	Thr	Ser	Leu	Arg	Val 25	Ser	Pro	Ser	Ile	His 30	Gly	Tyr
His	Phe	Asp 35	Thr	Ala	Ser	Arg	Lys 40	Lys	Ala	Val	Gly	Asn 45	Ile	Phe	Glu
Asn	Thr 50	Asp	Gln	Glu	Ser	Leu 55	Glu	Arg	Leu	Phe	Arg 60	Asn	Ser	Gly	Asp
Lys 65	Lys	Ala	Glu	Glu	Arg 70	Ala	Lys	Ile	Ile	Phe 75	Ala	Ile	Asp	Gln	Asp 80
Val	Glu	Glu	Lys	Thr 85	Arg	Ala	Leu	Met	Ala 90	Leu	Lys	Lys	Arg	Thr 95	Lys
Asp	Lys	Leu	Phe 100	Gln	Phe	Leu	Lys	Leu 105	Arg	Lys	Tyr	Ser	Ile 110	Lys	Val

His

<210> 148
<211> 88
<212> PRT
<213> homo sapiens



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<210> 149
<211> 134
<212> PRT
<213> homo sapiens
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[illegible]

<210> 155
 <211> 25
 <212> PRT
 <213> homo sapiens

<400> 155

Phe	Phe	Phe	Leu	Leu	Gln	Lys	Ile	Gly	Gly	Ile	Phe	Thr	Phe	Ile	Val
1				5				10						15	
Phe	Leu	Ser	Asn	Phe	Ser	Thr	His	Ile							
			20					25							

<210> 156
 <211> 40
 <212> PRT
 <213> homo sapiens

<400> 156

Ile	Ser	Cys	Asn	Val	Arg	Leu	Glu	Lys	Ile	Trp	Tyr	Leu	Gly	Tyr	Phe
1				5					10					15	
Gln	Gly	Thr	Ile	Lys	Ser	Asp	Phe	Cys	Phe	Phe	Val	Lys	Lys	Asn	Phe
			20					25					30		
Phe	Asn	Gln	Tyr	Cys	Phe	Tyr	Lys								
		35					40								

<210> 157
 <211> 66
 <212> PRT
 <213> homo sapiens

<400> 157

Asn	Ala	Asn	Tyr	Cys	Ile	His	His	Lys	Leu	Lys	Lys	Arg	Thr	Cys	Ile
1				5					10					15	
Arg	Arg	Leu	Lys	Thr	Arg	Lys	Lys	Ile	Gln	His	Pro	Asn	Met	Tyr	Ser
			20					25					30		
Gln	Glu	Gly	Asn	Gln	Phe	Cys	Asn	Arg	Thr	Gly	Ile	Met	Asn	Tyr	Lys
		35					40					45			
Gln	Glu	Gly	Val	Glu	Lys	Glu	Glu	Lys	Lys	Met	Cys	Ile	Glu	Phe	Lys
	50					55					60				
Thr	Leu														
65															

<210> 158
 <211> 23
 <212> PRT
 <213> homo sapiens

<400> 158

Pro	Cys	Cys	Glu	Val	Leu	Ala	Gly	Val	Gly	Asn	Val	Trp	Lys	Cys	Ser
1				5					10					15	

Gln Gln Val Cys Trp Gly Val
20

<210> 159
<211> 57
<212> PRT
<213> homo sapiens

<400> 159

Pro	Ala	Val	Lys	Ser	Trp	Gln	Val	Leu	Val	Met	Cys	Gly	Asn	Ala	Val
1				5					10					15	
Ser	Lys	Phe	Ala	Gly	Glu	Phe	Asp	Lys	Ser	Ile	Lys	Gln	Asn	Lys	Lys
			20					25					30		
Ser	Leu	Gly	Ile	Ile	Leu	Phe	His	Asp	Phe	Phe	Cys	Ser	Phe	Thr	Pro
		35					40					45			
Glu	Gly	Arg	Asn	Gly	Leu	Gln	Gln	Val	Val	Glu	Glu	Glu	Gly	Gly	Glu
	50					55					60				
Gln	Val	Tyr													
65															

<210> 160
<211> 108
<212> PRT
<213> homo sapiens

<400> 160

Glu	Gly	Glu	Pro	Ala	Cys	Ser	Gly	Ile	Gln	Ala	Arg	Arg	Val	Thr	Pro
1				5					10					15	
Cys	Pro	Ser	Pro	Arg	Asp	Ala	Ser	Pro	Ala	Pro	Ala	Ser	Glu	Thr	Ser
			20					25					30		
Leu	Ser	Val	Pro	Ala	Thr	Leu	Val	Gly	Gly	Ser	Asp	Leu	Ile	His	Phe
		35					40					45			
Gln	Val	Gly	Ser	Gly	Pro	Thr	Pro	Gly	Pro	Ala	Glu	Asp	Arg	Ala	Ala
	50					55					60				
Arg	Pro	Ser	Trp	Leu	Thr	Leu	Gln	Leu	Ala	Leu	Gly	Trp	Gly	Gly	Arg
65					70					75					80
Glu	Leu	Met	Ser	Val	Ala	Ser	Leu	Ser	Trp	Gly	Phe	Pro	Ala	Cys	Pro
				85					90					95	
Val	Val	Ser	Cys	Pro	Arg	Cys	Tyr	Arg	Gly	Cys	Ala				
			100					105							

<210> 161
<211> 20
<212> PRT

<213> homo sapiens

<400> 161

Phe	Cys	Ser	Thr	Thr	Ser	Ser	Val	Ala	Leu	His	Gln	Lys	Glu	Gly	Met
1				5					10					15	

Gly	Tyr	Ser	Arg
			20

<210> 162

<211> 61

<212> PRT

<213> homo sapiens

<400> 162

Ile	Pro	Gly	Leu	Lys	Tyr	Phe	Val	Gly	Ile	Ala	Tyr	Tyr	Ile	Ile	Leu
1				5					10					15	

Ala	Asp	Glu	Pro	Gln	Asp	Asn	Gly	Tyr	Arg	His	Thr	His	Thr	Tyr	Thr
			20					25					30		

His	Thr	Lys	Ser	Gln	Leu	Leu	Lys	Ser	Gly	Leu	Gly	Ile	Arg	Leu	Leu
		35					40					45			

Cys	Pro	Val	Lys	Asn	Ser	Cys	Thr	Glu	Val	Ile	Val	Thr
	50					55					60	

<210> 163

<211> 22

<212> PRT

<213> homo sapiens

<400> 163

Leu	Met	Asn	Leu	Arg	Thr	Thr	Ala	Thr	Asp	Thr	His	Ile	His	Thr	Arg
1				5					10					15	

Thr	Gln	Asn	Leu	Ser	Cys
			20		

<210> 164

<211> 37

<212> PRT

<213> homo sapiens

<400> 164

Thr	Ser	Gly	Gln	Arg	Leu	Gln	Thr	His	Thr	Tyr	Ile	His	Ala	His	Lys
1				5					10					15	

Ile	Ser	Ala	Val	Glu	Glu	Trp	Ala	Trp	Asn	Gln	Thr	Ser	Val	Ser	Ser
			20					25					30		

Lys	Lys	Leu	Leu	His
		35		

<210> 165

<211> 72

<212> PRT

<213> homo sapiens

<400> 165

Thr	Val	Pro	Phe	Ser	Val	Ser	Ala	Ser	Gly	Phe	His	Leu	Ile	Phe	Phe
1				5					10					15	
Ala	Leu	Pro	Ile	Leu	Phe	Gln	Pro	Val	Ala	Lys	Asn	His	Glu	Thr	Arg
			20					25					30		
Gln	Trp	Lys	His	Arg	His	Arg	Arg	Arg	Gly	Pro	Ser	Cys	Ala	Leu	Lys
		35					40					45			
Ala	Gly	Lys	Thr	Ala	Ser	Gly	Ala	Gly	Glu	Val	Val	Arg	Cys	Leu	Ser
	50					55					60				
Glu	Gln	Ser	Val	Ala	Ile	Ser	Arg								
65					70										

<210> 166

<400> 166

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<210> 167

<400> 167

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<210> 168

<211> 25

<212> PRT

<213> homo sapiens

<400> 168

Leu	Ile	Ser	Thr	Ser	Glu	Glu	Val	Leu	Thr	Phe	Ser	Met	Leu	His	Arg
1				5					10					15	
Asn	Trp	Tyr	Asn	Met	Pro	Ser	Val	Tyr							
			20					25							

<210> 169

<211> 20

<212> PRT

<213> homo sapiens

<400> 169

Leu	Lys	Leu	Leu	Ala	Trp	Ser	Tyr	Leu	His	Ser	Phe	Cys	Val	Leu	Phe
1				5					10					15	
Ala	Ser	Cys	Ile												
			20												

<210> 170

<211> 32

<212> PRT

<213> homo sapiens

<400> 170

Leu	Leu	Ala	Cys	Cys	Thr	Glu	Thr	Gly	Ile	Thr	Cys	Leu	Gln	Tyr	Thr
1				5					10					15	

Asn	Thr	His	Met	Leu	Ser	Phe	Val	Leu	Phe	Trp	Gln	Leu	Thr	Arg	Ser
			20					25					30		

<210> 171
 <211> 50
 <212> PRT
 <213> homo sapiens

<400> 171

Ile	Ala	Leu	Ser	Cys	Cys	Phe	Asn	Val	Val	His	Thr	Ile	Ala	Ser	Gln
1				5					10					15	
Thr	Cys	Tyr	Ser	Ser	Val	Ile	Cys	Ser	Val	Val	Thr	Lys	Val	Thr	Gly
			20					25					30		
Leu	Val	Leu	Phe	Ala	Gln	Phe	Leu	Arg	Leu	Val	Cys	Phe	Leu	His	Leu
		35					40					45			
Ile	Asn														
	50														

<210> 172
 <211> 51
 <212> PRT
 <213> homo sapiens

<400> 172

Glu	His	Tyr	Thr	Ile	Gly	Phe	Gln	Tyr	Cys	Thr	His	Lys	Ile	His	Thr
1				5					10					15	
Cys	Val	Gln	Lys	Val	Ser	Ser	Ser	Arg	Leu	Val	Ile	Pro	Phe	Thr	Trp
			20					25					30		
Lys	Ile	Asn	Glu	Gly	Asn	Leu	Tyr	Ile	Leu	Tyr	Lys	Asn	Lys	Ser	Lys
		35					40					45			
Phe	Ile	Tyr													
	50														

<210> 173
 <211> 239
 <212> PRT
 <213> homo sapiens

<400> 173

Leu	Phe	Ile	His	Phe	Arg	Asn	Asn	Thr	Asn	Asn	Trp	Arg	Glu	Ile	Pro
1				5					10					15	
Glu	Asn	Leu	Met	Asp	Gln	Tyr	Ser	Glu	Val	Asn	Ala	Ile	Ser	Thr	Ala
			20					25					30		
Cys	Ser	Asn	Gly	Val	Pro	Glu	Cys	Glu	Glu	Met	Val	Ser	Gly	Leu	Phe
		35					40					45			

57

Lys	Gln 50	Trp	Met	Glu	Asn	Pro 55	Asn	Asn	Asn	Pro	Ile 60	His	Pro	Asn	Leu
Arg 65	Ser	Thr	Val	Tyr	Cys 70	Asn	Ala	Ile	Ala	Gln 75	Gly	Gly	Glu	Glu	Glu 80
Trp	Asp	Phe	Ala	Trp 85	Glu	Gln	Phe	Arg	Asn 90	Ala	Thr	Leu	Val	Asn 95	Glu
Ala	Asp	Lys	Leu 100	Arg	Ala	Ala	Leu	Ala 105	Cys	Ser	Lys	Glu	Leu 110	Trp	Ile
Leu	Asn	Arg 115	Tyr	Leu	Ser	Tyr	Thr 120	Leu	Asn	Pro	Asp	Leu 125	Ile	Arg	Lys
Gln	Asp 130	Ala	Thr	Ser	Thr	Ile 135	Ile	Ser	Ile	Thr	Asn 140	Asn	Val	Ile	Gly
Gln 145	Gly	Leu	Val	Trp	Asp 150	Phe	Val	Gln	Ser	Asn 155	Trp	Lys	Lys	Leu	Phe 160
Asn	Asp	Tyr	Gly	Gly 165	Gly	Ser	Phe	Ser	Phe 170	Ser	Asn	Leu	Ile	Gln 175	Ala
Val	Thr	Arg	Arg 180	Phe	Ser	Thr	Glu	Tyr 185	Glu	Leu	Gln	Gln	Leu 190	Glu	Gln
Phe	Lys	Lys 195	Asp	Asn	Glu	Glu	Thr 200	Gly	Phe	Gly	Ser	Gly 205	Thr	Arg	Ala
Leu	Glu 210	Gln	Ala	Leu	Glu	Lys 215	Thr	Lys	Ala	Asn	Ile 220	Lys	Trp	Val	Lys
Glu 225	Asn	Lys	Glu	Val	Val 230	Leu	Gln	Trp	Phe	Thr 235	Glu	Asn	Ser	Lys	

<210> 174
<400> 174
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<210> 175
<400> 175
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<210> 176
<400> 176
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<210> 177
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<400> 180

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<210> 181

<400> 181

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<210> 182

<400> 182

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<210> 183

<211> 109

<212> PRT

<213> homo sapiens

<400> 183

Tyr	Ala	Asn	Gln	Ser	Ser	Ser	Leu	Arg	Phe	Lys	Ile	Lys	Tyr	Lys	Leu
1				5					10					15	
Leu	Cys	Phe	Ser	Thr	His	Ser	Gly	Ser	Ile	Val	Pro	Glu	Pro	Asp	Cys
			20					25					30		
Tyr	Phe	Phe	Ile	Leu	Asn	Ile	Ile	Phe	Pro	His	Leu	Ile	Cys	Leu	Pro
		35					40					45			
Leu	Ile	His	Arg	His	Leu	Glu	Lys	Glu	Met	Gly	Gly	Cys	Leu	Leu	Ser
	50					55					60				
Leu	Ser	Leu	Cys	Phe	Val	Pro	Val	Val	Arg	Leu	Ala	Ala	Ser	Val	Ala
65					70					75					80
Arg	Trp	Ala	Trp	Leu	Glu	Pro	Trp	Val	Arg	Gln	Val	Ala	Gly	Gly	Asp
				85					90					95	
Arg	Glu	Arg	Leu	Arg	Gly	Lys	Trp	Trp	His	Leu	Leu	Leu			
			100					105							

<210> 184

<211> 33

<212> PRT

<213> homo sapiens

<400> 184

Ser	Leu	Phe	Leu	Ser	Ser	Thr	Gly	Val	Ser	Ala	Pro	Leu	Gln	Gly	Gln
1				5					10					15	
Ser	Lys	Ser	Leu	His	Pro	Glu	Pro	Pro	Pro	Ile	Pro	Val	His	Phe	Ser
			20					25					30		

Arg

<210> 185
 <211> 46
 <212> PRT
 <213> homo sapiens

<400> 185

His 1	Ser	Phe	Ser	Ala 5	Arg	Leu	Glu	Phe	Leu 10	His	Leu	Cys	Arg	Gly 15	Lys
Val	Ser	Pro	Cys 20	Thr	Leu	Asn	His	Pro 25	Pro	Phe	Leu	Phe	Ile 30	Ser	Ala
Asp	Asn	Asp 35	Gly	Gly	Gly	Gly	Val 40	Ser	Ile	Val	Leu	Arg 45	Val		

<210> 186
 <211> 105
 <212> PRT
 <213> homo sapiens

<400> 186

Val 1	Glu	Gly	Thr	Cys 5	Ser	Asp	Gly	Val	Phe 10	Ser	Gly	Phe	Leu	Ala 15	Pro
Gly	Cys	Ala	Val 20	His	Arg	Pro	His	Arg 25	Pro	Trp	Pro	Gln	His 30	Pro	Gln
Gln	Gly	Gln 35	Trp	Lys	Cys	Gln	Ser 40	Ser	Lys	Cys	His	His 45	Phe	Pro	Leu
Ser	Leu 50	Ser	Leu	Ser	Pro	Pro 55	Ala	Thr	Cys	Leu	Thr 60	His	Gly	Ser	Asn
Gln 65	Ala	His	Arg	Ala	Thr 70	Asp	Ala	Ala	Ser	Leu 75	Thr	Thr	Gly	Thr	Lys 80
Gln	Arg	Glu	Arg	Asp 85	Asn	Arg	His	Pro	Pro 90	Ile	Ser	Phe	Ser	Lys 95	Cys
Leu	Trp	Met	Arg 100	Gly	Arg	Gln	Ile	Arg 105							

<210> 187
 <211> 73
 <212> PRT
 <213> homo sapiens

<400> 187

Arg 1	Gly	His	Ala	Val 5	Thr	Glu	Tyr	Leu	Val 10	Gly	Ser	Leu	Leu	Leu 15	Ala
Val	Gln	Phe	Thr 20	Gly	Pro	Thr	Gly	Leu 25	Gly	Pro	Ser	Ile	Pro 30	Ser	Arg

Asp	Ser	Gly 35	Ser	Val	Arg	Ala	Val 40	Asn	Ala	Thr	Thr	Ser 45	Leu	Ser	Ala
-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----

Ser	Pro 50	Cys	Pro	Arg	Gln	Pro 55	Pro	Ala	Ser	Pro	Thr 60	Ala	Leu	Thr	Lys
-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----

Pro 65	Thr	Glu	Gln	Leu	Thr 70	Leu	Pro	Val
-----------	-----	-----	-----	-----	-----------	-----	-----	-----

<210> 188
 <211> 28
 <212> PRT
 <213> homo sapiens

<400> 188

Met 1	Phe	Phe	Ile	Phe 5	Phe	Met	Leu	Ser	Ile 10	Gln	Ala	Leu	Phe	His 15	Gly
Gln	Gln	Val	Ile 20	Phe	His	Asn	Val	Asp 25	Phe	Pro	Lys				

<210> 189
 <211> 65
 <212> PRT
 <213> homo sapiens

<400> 189

Leu 1	Leu	Asn	Thr	Ala 5	Ile	Leu	Trp	Leu	Leu 10	Leu	Val	Phe	Leu	Trp 15	Tyr
Val	Val	Trp	Glu 20	Cys	Leu	Trp	Asn	Tyr 25	Gln	Tyr	Leu	Lys	Phe 30	Ser	Lys
Glu	Pro	Trp 35	Lys	Ser	Ile	Thr	Leu 40	Asn	Glu	Ser	Leu	Ser 45	Leu	Tyr	Met
Asn	Tyr 50	Val	Leu	Lys	Phe	Asp 55	Gln	Leu	Ser	Leu	Arg 60	His	Lys	Thr	Val

Ile
65

<210> 190
 <211> 30
 <212> PRT
 <213> homo sapiens

<400> 190

Cys 1	Phe	Ser	Phe	Phe 5	Ser	Cys	Tyr	Leu	Ser 10	Lys	His	Cys	Ser	Met 15	Val
Ser	Lys	Ser	Tyr 20	Phe	Ile	Met	Trp	Ile 25	Phe	Gln	Asn	Asn	Tyr 30		

<210> 191
 <211> 41

<212> PRT

<213> homo sapiens

<400> 191

Phe	Phe	Phe	Phe	Val	Thr	Asn	Val	Phe	Tyr	Leu	Phe	Ile	Asn	Lys	Lys
1				5					10					15	
Cys	Ile	Val	Gln	Ala	Leu	Tyr	Pro	Asn	Pro	Ser	Thr	Gln	Lys	Lys	Ile
			20					25					30		
Asn	Asn	Arg	Pro	Trp	Met	Ala	Gln	Thr							
		35					40								

<210> 192

<211> 29

<212> PRT

<213> homo sapiens

<400> 192

Tyr	Lys	Pro	Phe	Ile	Pro	Ile	Gln	Val	Leu	Arg	Lys	Arg	Leu	Thr	Thr
1				5					10					15	
Asp	Pro	Gly	Trp	His	Arg	His	Asn	Leu	Phe	Gly	Val	Ile			
			20					25							

<210> 193

<211> 33

<212> PRT

<213> homo sapiens

<400> 193

Ser	Ser	His	Met	Val	Thr	Asn	Thr	Tyr	Asp	Phe	Ser	Phe	Arg	Asn	Ile
1				5					10					15	
Ile	Arg	Arg	Leu	Asn	Leu	Leu	Leu	Gln	Gln	Gln	Lys	Phe	Asn	Pro	Leu
			20					25					30		
Asn															

<210> 194

<211> 153

<212> PRT

<213> homo sapiens

<400> 194

Thr	Pro	Leu	Arg	Lys	Glu	Val	Leu	Lys	Ser	Lys	Met	Gly	Lys	Ser	Glu
1				5					10					15	
Lys	Ile	Ala	Leu	Pro	His	Gly	Gln	Leu	Val	His	Gly	Ile	His	Leu	Tyr
			20					25					30		
Glu	Gln	Pro	Lys	Ile	Asn	Arg	Gln	Lys	Ser	Lys	Tyr	Asn	Leu	Pro	Leu
		35					40					45			
Thr	Lys	Ile	Thr	Ser	Ala	Lys	Arg	Asn	Glu	Asn	Asn	Phe	Trp	Gln	Asp
	50					55					60				

Ser 65	Val	Ser	Ser	Asp	Arg 70	Ile	Gln	Lys	Gln	Glu 75	Lys	Lys	Pro	Phe	Lys 80
Asn	Thr	Glu	Asn	Ile 85	Lys	Asn	Ser	His	Leu 90	Lys	Lys	Ser	Ala	Phe 95	Leu
Thr	Glu	Val	Ser 100	Gln	Lys	Glu	Asn	Tyr 105	Ala	Gly	Ala	Lys	Phe 110	Ser	Asp
Pro	Pro	Ser 115	Pro	Ser	Val	Leu	Pro 120	Lys	Pro	Pro	Ser	His 125	Trp	Met	Gly
Ser	Thr 130	Val	Glu	Asn	Ser	Asn 135	Gln	Asn	Arg	Glu	Leu 140	Met	Ala	Val	His
Leu 145	Lys	Thr	Leu	Leu	Lys 150	Val	Gln	Thr							

<210> 195
 <211> 304
 <212> PRT
 <213> homo sapiens
 <400> 195

Ser 1	Leu	Tyr	Tyr	Tyr 5	Gly	Ile	Arg	Asp	Leu 10	Ala	Thr	Val	Phe	Phe 15	Tyr
Met	Leu	Val	Ala 20	Ile	Ile	Ile	His	Ala 25	Val	Ile	Gln	Glu	Tyr 30	Met	Leu
Asp	Lys	Ile 35	Asn	Arg	Arg	Met	His 40	Phe	Ser	Lys	Thr	Lys 45	His	Ser	Lys
Phe	Asn 50	Glu	Ser	Gly	Gln	Leu 55	Ser	Ala	Phe	Tyr	Leu 60	Phe	Ala	Cys	Val
Trp 65	Gly	Thr	Phe	Ile	Leu 70	Ile	Ser	Glu	Asn	Tyr 75	Ile	Ser	Asp	Pro	Thr 80
Ile	Leu	Trp	Arg	Ala 85	Tyr	Pro	His	Asn	Leu 90	Met	Thr	Phe	Gln	Met 95	Lys
Phe	Phe	Tyr	Ile 100	Ser	Gln	Leu	Ala	Tyr 105	Trp	Leu	His	Ala	Phe 110	Pro	Glu
Leu	Tyr	Phe 115	Gln	Lys	Thr	Lys	Lys 120	Glu	Asp	Ile	Pro	Arg 125	Gln	Leu	Val
Tyr	Ile 130	Gly	Leu	Tyr	Leu	Phe 135	His	Ile	Ala	Gly	Ala 140	Tyr	Leu	Leu	Asn

Leu 145	Asn	His	Leu	Gly	Leu 150	Val	Leu	Leu	Val	Leu 155	His	Tyr	Phe	Val	Glu 160
Phe	Leu	Phe	His	Ile 165	Ser	Arg	Leu	Phe	Tyr 170	Phe	Ser	Asn	Glu	Lys 175	Tyr
Gln	Lys	Gly	Phe 180	Ser	Leu	Trp	Ala	Val 185	Leu	Phe	Val	Leu	Gly 190	Arg	Leu
Leu	Thr	Leu 195	Ile	Leu	Ser	Val	Leu 200	Thr	Val	Gly	Phe	Gly 205	Leu	Ala	Arg
Ala	Glu 210	Asn	Gln	Lys	Leu	Asp 215	Phe	Ser	Thr	Gly	Asn 220	Phe	Asn	Val	Leu
Ala 225	Val	Arg	Ile	Ala	Val 230	Leu	Ala	Ser	Ile	Cys 235	Val	Thr	Gln	Ala	Phe 240
Met	Met	Trp	Lys	Phe 245	Ile	Asn	Phe	Gln	Leu 250	Arg	Arg	Trp	Arg	Glu 255	His
Ser	Ala	Phe	Gln 260	Ala	Pro	Ala	Val	Lys 265	Lys	Lys	Pro	Thr	Val 270	Thr	Lys
Gly	Arg	Ser 275	Ser	Lys	Lys	Gly	Thr 280	Glu	Asn	Gly	Val	Asn 285	Gly	Thr	Leu
Thr	Ser 290	Asn	Val	Ala	Asp	Ser 295	Pro	Arg	Asn	Lys	Lys 300	Glu	Lys	Ser	Ser

<210> 196
 <400> 196
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 <210> 197
 <400> 197
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 <210> 198
 <400> 198
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 <210> 199
 <400> 199
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 <210> 200
 <400> 200
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 <210> 201
 <211> 198
 <212> PRT
 <213> homo sapiens

<400> 201

Lys 1	Met	Thr	Thr	Ala 5	Ala	Arg	Pro	Thr	Phe 10	Glu	Pro	Ala	Arg	Gly 15	Gly
Arg	Gly	Lys	Gly 20	Glu	Gly	Asp	Leu	Ser 25	Gln	Leu	Ser	Lys	Gln 30	Tyr	Ser
Ser	Arg	Asp 35	Leu	Pro	Ser	His	Thr 40	Lys	Ile	Lys	Tyr	Arg 45	Gln	Thr	Thr
Gln	Asp 50	Ala	Pro	Glu	Glu	Val 55	Arg	Asn	Arg	Asp	Phe 60	Arg	Arg	Glu	Leu
Glu 65	Glu	Arg	Glu	Arg	Ala 70	Ala	Ala	Arg	Glu	Lys 75	Asn	Arg	Asp	Arg	Pro 80
Thr	Arg	Glu	His	Thr 85	Thr	Ser	Ser	Ser	Val 90	Ser	Lys	Lys	Pro	Arg 95	Leu
Asp	Gln	Ile	Pro 100	Ala	Ala	Asn	Leu	Asp 105	Ala	Asp	Asp	Pro	Leu 110	Thr	Asp
Glu	Glu	Asp 115	Glu	Asp	Phe	Glu	Glu 120	Glu	Ser	Asp	Asp	Asp 125	Asp	Thr	Ala
Ala	Leu 130	Leu	Ala	Glu	Leu	Glu 135	Lys	Ile	Lys	Lys	Glu 140	Arg	Ala	Glu	Lys
Gly 145	Gln	Gly	Pro	Gly	Lys 150	Gly	Pro	Arg	Ala	Lys 155	Lys	Ala	Leu	Arg	Gly 160
Gly	Arg	Val	Ser	Phe 165	Trp	Glu	Asn	Ile	Gly 170	Trp	Ala	Gly	Asn	Pro 175	Phe
Pro	Leu	Ile	Leu 180	Ser	Leu	Ala	His	Ser 185	Lys	Leu	Lys	Ala	Asp 190	Phe	Glu
Lys	Phe	Glu 195	Arg	Arg	Val										

<210> 202

<211> 55

<212> PRT

<213> homo sapiens

<400> 202

Val 1	Leu	Ile	Phe	Leu 5	Val	Phe	Leu	Leu	Asp 10	Gly	Lys	Ala	Val	Gly 15	Ile
Asn	Arg	Gly	Gln 20	Arg	Leu	Met	Leu	Glu 25	Trp	Pro	Val	Glu	Val 30	Val	Glu

Gln Ser Ser His Leu Leu Ser Gly Ala Val Ser Gly Trp Val Tyr Leu
 35 40 45

Lys Ala Thr Lys Cys Phe Gly
 50 55

<210> 203
 <211> 66
 <212> PRT
 <213> homo sapiens

<400> 203

Ser Pro Gly Phe Phe Leu Ser Leu Pro Phe Ser Thr Gly Xxx Ala Trp
 1 5 10 15
 Ala Ser Ser Ser Cys His Pro Ser Arg Lys Ala Pro Ala Pro Ser Cys
 20 25 30
 Leu Pro Ala Ala Cys Ile Gln Gly Gln Ser Ser Gly Leu Gln Thr Gly
 35 40 45
 Leu Val Pro Pro Pro Leu Gln Gly Met Gly Val Gly Glu Gly Ala Phe
 50 55 60

Lys Lys
 65

<210> 204
 <211> 161
 <212> PRT
 <213> homo sapiens

<400> 204

His Leu Gly Tyr Gly Lys Leu Leu Trp Cys Val Val Gly Phe Leu Phe
 1 5 10 15
 Ser Phe Leu Ser Phe Phe Ser Pro Phe Ser Leu Leu Ala Phe Ser Phe
 20 25 30
 Pro Phe Pro Ser Pro Leu Ala Lys Leu Gly Pro His Pro His Val Ile
 35 40 45
 Leu Leu Gly Arg Arg Leu Pro His Leu Val Cys Arg Gln His Ala Ser
 50 55 60
 Lys Ala Arg Ala Gln Ala Cys Arg Leu Gly Trp Cys Leu Leu Arg Phe
 65 70 75 80
 Arg Val Trp Glu Leu Val Lys Gly Leu Ser Lys Asn Asn Lys Lys Lys
 85 90 95
 Lys Val Lys Ser Leu Val Ala Ser Ile His Ser Asp Pro Gly Arg Gln

100

66

105

110

Gln	Gly	Phe	Val	Asp	Leu	Asp	Ser	Leu	Gly	Met	Ser	Ser	Cys	Gln	Pro
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Gly	Gln	Asp	Pro	Gly	Leu	Pro	Arg	Ala	Glu	Ala	Leu	Pro	Ala	Thr	Arg
	130					135					140				
Ile	Pro	Pro	Leu	Trp	Gly	Leu	Cys	Val	Gln	Arg	Ser	Gly	Ser	Glu	Thr
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Ser

<210> 205
 <211> 37
 <212> PRT
 <213> homo sapiens

<400> 205

Leu	Asp	Leu	Val	Phe	Ile	Val	Glu	His	Thr	Tyr	Gln	Gly	Glu	Val	Leu
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His	Thr	Gln	Leu	Gln	Ile	Ile	Phe	Gly	Lys	Lys	Ala	Val	Lys	Lys	Ile
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Lys	Leu	Gln	Leu	Leu
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<210> 206
 <211> 32
 <212> PRT
 <213> homo sapiens

<400> 206

Glu	Asn	Tyr	Phe	Ala	Phe	Ser	Val	Asn	Leu	Arg	Ser	Val	Leu	Asn	Lys
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			20					25					30		

<210> 207
 <211> 102
 <212> PRT
 <213> homo sapiens

<400> 207

Cys	Met	Leu	Gln	Ile	Asn	Leu	Tyr	Phe	Phe	Pro	Leu	Gly	Phe	Ser	Lys
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Asn	Thr	Thr	Thr	Ser	Thr	Pro	Asn	Glu	His	Gly	Thr	Cys	Leu	Phe	Leu
			20					25					30		
Pro	Leu	Leu	Ile	Tyr	Ser	Arg	Phe	Ser	Ser	Val	Phe	Phe	Ser	Asn	Ala
		35					40					45			

Ala Phe Ser Cys Ser Ser Gly Leu Leu Ser Gly Ser Ile Val Ala Lys
 50 55 60
 Asp Ser Ile Arg Ser Thr Leu His Ser Asp Val Lys His Ser His Cys
 65 70 75 80
 Leu Asp Ser Ser Ser Phe Leu Ser Ser Asn Ser Ile Thr Asp Lys Ala
 85 90 95

Ser Val Leu Thr Asp Glu
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<210> 208
 <211> 34
 <212> PRT
 <213> homo sapiens

<400> 208

Val Leu Phe Ser Lys Glu Tyr Val Ile Asp Leu Gln Val Ser Ser Arg
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Asn Pro

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 <213> homo sapiens

<400> 209

Val Ala His Trp Gln Gly Asp Gln Lys His Tyr Phe His Thr Cys Val
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Val Gln Trp His Asp Leu Gly Ser Leu Gln Pro
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 <212> PRT
 <213> homo sapiens

<400> 210

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 Arg Leu Arg Asn Asp Phe Pro Asp Glu Lys Ile Pro Thr Leu Arg Glu
 20 25 30
 Ala Val Ala Glu Cys Leu Asn His Asn Leu Thr Ile Phe Phe Asp Val
 35 40 45

Lys	Gly 30	His	Ala	His	Lys	Ala 55	Thr	Glu	Ala	Leu	Lys 60	Lys	Met	Tyr	Met	
Glu 65	Phe	Pro	Gln	Leu	Tyr 70	Asn	Asn	Ser	Val	Val 75	Cys	Ser	Phe	Leu	Pro 80	
Glu	Val	Ile	Tyr	Lys 85	Met	Arg	Gln	Thr	Asp 90	Arg	Asp	Val	Ile	Thr 95	Ala	
Leu	Thr	His	Arg 100	Pro	Trp	Ser	Leu	Ser 105	His	Thr	Gly	Asp	Gly 110	Lys	Pro	
Arg	Tyr	Asp 115	Thr	Phe	Trp	Lys	His 120	Phe	Ile	Phe	Val	Met 125	Met	Asp	Ile	
Leu	Leu 130	Asp	Trp	Ser	Met	His 135	Asn	Ile	Leu	Trp	Tyr 140	Leu	Cys	Gly	Ile	
Ser 145	Ala	Phe	Leu	Met	Gln 150	Lys	Asp	Phe	Val	Ser 155	Pro	Ala	Tyr	Leu	Lys 160	
Lys	Trp	Ser	Ala	Lys 165	Gly	Ile	Gln	Val	Val 170	Gly	Trp	Thr	Val	Asn 175	Thr	
Phe	Asp	Glu	Lys 180	Ser	Tyr	Tyr	Glu	Ser 185	His	Leu	Gly	Ser	Ser 190	Tyr	Ile	
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<210> 212
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<210> 213
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<210> 214
 <211> 33
 <212> PRT
 <213> homo sapiens

<400> 214

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 <212> PRT
 <213> homo sapiens

<400> 215

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			20					25					30		
Ile	Arg	Ser	Ser	Asp	Ser	Leu	Ile	Gln	Ser	Ser	Ser	Phe	Ser	Ser	Leu
		35					40					45			
Phe	Leu	Cys	Arg	Leu	Leu	Asp	Ile	Tyr	Cys	Ser	Thr	Thr			
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 <211> 24
 <212> PRT
 <213> homo sapiens

<400> 216

Pro	Met	Tyr	Lys	Ile	Ala	Lys	Cys	Leu	Leu	Phe	Ile	Lys	Arg	Cys	Asn
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			20												

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 <213> homo sapiens

<400> 217

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1380

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1024

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<400> 219

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<210> 220
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 <212> DNA
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3210

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 <212> DNA
 <213> homo sapiens

<400> 221

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1030

<210> 222
 <211> 1216
 <212> DNA
 <213> homo sapiens

<400> 222

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<210> 223
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 <212> DNA
 <213> homo sapiens

<400> 223

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<210> 224
 <211> 349

<212> DNA
 <213> homo sapiens

<400> 224

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 <211> 1502
 <212> DNA
 <213> homo sapiens

<400> 225

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<210> 226
 <211> 1892
 <212> DNA
 <213> homo sapiens

<400> 226

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<210> 227

<211> 1522

<212> DNA

<213> homo sapiens

<400> 227

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 <211> 2016
 <212> DNA
 <213> homo sapiens

<400> 113

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2016

<210> 229
 <211> 765
 <212> DNA
 <213> homo sapiens

<400> 229

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<400> 230

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 <212> DNA
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<400> 231

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1473

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 <211> 2613
 <212> DNA
 <213> homo sapiens

<400> 232

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2503

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 <211> 1756
 <212> DNA
 <213> homo sapiens

<400> 233

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1756

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<400> 234

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1286

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<211> 1230
<212> DNA
<213> homo sapiens

<400> 235

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1230

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 <212> DNA
 <213> homo sapiens

<400> 237

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<400> 238

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<211> 2409

<212> DNA

<213> homo sapiens

<400> 240

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<211> 2594

<212> DNA

<213> homo sapiens

<400> 241

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Asp 1	His	Leu	Gln	Pro 5	Gln	Lys	Asn	Leu	Cys 10	Thr	Cys	Leu	Ala	Pro 15	Gly
Arg	Gly	Gly	Gln 20	Gln	Gly	Ser	Ser	Gly 25	Leu	Glu	Pro	Ala	Leu 30	Phe	Val
Glu	Asp	Ile 35	Val	Val	Ser	Arg	Pro 40	Val	Glu	Lys	Val	Asp 45	Leu	Gly	Leu

Gly	Ala	Leu	Arg	Glu	Asp	Val	Arg	Ile	Gly	Gly	Ala	Ala	Leu	Ala	Ala
	50					35					60				
Val	His	Val	Leu	His	Leu	Asp	Gly	His	Ala	Glu	Gly	Leu	Gly	Gln	Arg
65					70					75					80
Asn	Asp	Val	Asp	Val	Val	Ala	Leu	Leu	Ala	His	Gly	Leu	His	Leu	Leu
				95					90					95	
Leu	Ala	Glu	Leu	Leu	Asp	Ser	Pro	Ser	Thr	Leu	Asp	Glu	Val	Leu	Glu
			100					105					110		
Glu	Leu	Ala	Leu	Ala	Leu	Gln	Val	Ala	Arg	Gly	Glu	Gln	Pro	Gln	Val
		115					120					125			
Asp	His	Lys	Val	Val	Gly	Gly	Ala	Leu	Val	Ile	Glu	Gly	Gly	Gln	Gln
	130					135					140				
Val	Gly	Asp	Arg	Gly	Leu	Leu	Leu	His	Leu	Leu	Asn	Gln	Val	His	Glu
145					150					155					160
Arg	Val	Val	Glu	Ile	Leu	Asn	Cys	Glu	Phe	Ser	Glu	Ala	Leu	Gly	His
				165					170					175	
Gln	Val	Phe	Leu	Ala	Leu	Gly	Arg	His	Ser	Leu	Glu	Pro	Leu	Gln	Leu
			180					185					190		
Leu	Ala	Val	Ile	Gln	Gln	Cys	Leu	Gln	Val	Gly	Glu	Ser	Glu	Ser	Pro
		195					200					205			
Ile	Glu	Thr	Val	Ala	Val	Arg	Pro	Gly	Leu	Ala	Asp	Val	Arg	Val	Leu
	210					215					220				
Phe	Val	Glu	Val	Leu	Asp	Leu	Leu	Leu	Ile	Asp	Val	Val	Ile	Phe	Ser
225					230					235					240
Ile	Leu	Leu	Val												
<210>	251														
<211>	293														
<212>	PRT														
<213>	homo sapiens														
<400>	251														
Met	Leu	Ala	Ala	Arg	Leu	Val	Cys	Leu	Arg	Thr	Leu	Pro	Ser	Arg	Val
1				5					10					15	
Phe	His	Pro	Ala	Phe	Thr	Lys	Ala	Ser	Pro	Val	Val	Lys	Asn	Ser	Ile
			20					25					30		

[illegible]

290

<210> 252
 <211> 563
 <212> PRT
 <213> homo sapiens

<400> 252

Met 1	Glu	Arg	Glu	Leu 5	Asn	His	Glu	Lys	Glu 10	Arg	Cys	Asp	Gln	Leu 15	Gln
Ala	Glu	Gln	Lys 20	Gly	Leu	Thr	Glu	Val 25	Thr	Gln	Ser	Leu	Lys 30	Met	Glu
Asn	Glu	Glu 35	Phe	Lys	Lys	Arg	Phe 40	Ser	Asp	Ala	Thr	Ser 45	Lys	Ala	His
Gln	Leu 50	Glu	Glu	Asp	Ile	Val 55	Ser	Val	Thr	His	Lys 60	Ala	Ile	Glu	Lys
Glu 65	Thr	Glu	Leu	Asp	Ser 70	Leu	Lys	Asp	Lys	Leu 75	Lys	Lys	Ala	Gln	His 80
Glu	Arg	Glu	Gln	Leu 85	Glu	Cys	Gln	Leu	Lys 90	Thr	Glu	Lys	Asp	Glu 95	Lys
Glu	Leu	Tyr	Lys 100	Val	His	Leu	Lys	Asn 105	Thr	Glu	Ile	Glu	Asn 110	Thr	Lys
Leu	Met	Ser 115	Glu	Val	Gln	Thr	Leu 120	Lys	Asn	Leu	Asp	Gly 125	Asn	Lys	Glu
Ser	Val 130	Ile	Thr	His	Phe	Lys 135	Glu	Glu	Ile	Gly	Arg 140	Leu	Gln	Leu	Cys
Leu 145	Ala	Glu	Lys	Glu	Asn 150	Leu	Gln	Arg	Thr	Phe 155	Leu	Leu	Thr	Thr	Ser 160
Ser	Lys	Glu	Asp	Thr 165	Cys	Phe	Leu	Lys	Glu 170	Gln	Leu	Arg	Lys	Ala 175	Glu
Glu	Gln	Val	Gln 180	Ala	Thr	Arg	Gln	Glu 185	Val	Val	Phe	Leu	Ala 190	Lys	Glu
Leu	Ser	Asp 195	Ala	Val	Asn	Val	Arg 200	Asp	Arg	Thr	Met	Ala 205	Asp	Leu	His
Thr	Ala 210	Arg	Leu	Glu	Asn	Glu 215	Lys	Val	Lys	Lys	Gln 220	Leu	Ala	Asp	Ala
Val	Ala	Glu	Leu	Lys	Leu	Asn	Ala	Met	Lys	Lys	Asp	Gln	Asp	Lys	Thr

225						230		95			235				240
Asp	Thr	Leu	Glu	His 245	Glu	Leu	Arg	Arg	Glu 250	Val	Glu	Asp	Leu	Lys 255	Leu
Arg	Leu	Gln	Met 260	Ala	Ala	Asp	His	Tyr 265	Lys	Glu	Lys	Phe	Lys 270	Glu	Cys
Gln	Arg	Leu 275	Gln	Lys	Gln	Ile	Asn 280	Lys	Leu	Ser	Asp	Gln 285	Ser	Ala	Asn
Asn	Asn 290	Asn	Val	Phe	Thr	Lys 295	Lys	Thr	Gly	Asn	Gln 300	Gln	Lys	Val	Asn
Asp 305	Ala	Ser	Val	Asn	Thr 310	Asp	Pro	Ala	Thr	Ser 315	Ala	Ser	Thr	Val	Asp 320
Val	Lys	Pro	Ser	Pro 325	Ser	Ala	Ala	Glu	Ala 330	Asp	Phe	Asp	Ile	Val 335	Thr
Lys	Gly	Gln	Val 340	Cys	Glu	Met	Thr	Lys 345	Glu	Ile	Ala	Asp	Lys 350	Thr	Glu
Lys	Tyr	Asn 355	Lys	Cys	Lys	Gln	Leu 360	Leu	Gln	Asp	Glu	Lys 365	Ala	Lys	Cys
Asn	Lys 370	Tyr	Ala	Asp	Glu	Leu 375	Ala	Lys	Met	Glu	Leu 380	Lys	Trp	Lys	Glu
Gln 385	Val	Lys	Ile	Ala	Glu 390	Asn	Val	Lys	Leu	Glu 395	Leu	Ala	Glu	Val	Gln 400
Asp	Asn	Tyr	Lys	Glu 405	Leu	Lys	Arg	Ser	Leu 410	Glu	Asn	Pro	Ala	Glu 415	Arg
Lys	Met	Glu	Asp 420	Gly	Ala	Asp	Gly	Ala 425	Phe	Tyr	Pro	Asp	Glu 430	Ile	Gln
Arg	Pro	Pro 435	Val	Arg	Val	Pro	Ser 440	Trp	Gly	Leu	Glu	Asp 445	Asn	Val	Val
Cys	Ser 450	Gln	Pro	Ala	Arg	Asn 455	Phe	Ser	Arg	Pro	Asp 460	Gly	Leu	Glu	Asp
Ser 465	Glu	Asp	Ser	Lys	Glu 470	Asp	Glu	Asn	Val	Pro 475	Thr	Ala	Pro	Asp	Pro 480
Pro	Ser	Gln	His	Leu 485	Arg	Gly	His	Gly	Thr 490	Gly	Phe	Cys	Phe	Asp 495	Ser

Ser	Phe	Asp	Val 300	His	Lys	Lys	Cys	Pro 305	Leu	Cys	Glu	Leu	Met 310	Phe	Pro
Pro	Asn	Tyr 315	Asp	Gln	Ser	Lys	Phe 320	Glu	Glu	His	Val	Glu 325	Ser	His	Trp
Lys	Val 530	Cys	Pro	Met	Cys	Ser 535	Glu	Gln	Phe	Pro	Pro 540	Asp	Tyr	Asp	Gln
Gln 545	Val	Phe	Glu	Arg	His 550	Val	Gln	Thr	His	Phe 555	Asp	Gln	Asn	Val	Leu 560
Asn	Phe	Asp													

<210> 253
 <211> 249
 <212> PRT
 <213> homo sapiens
 <400> 253

Trp 1	Thr	Gly	Thr	Gly 5	Arg	Gly	Ala	Val	Ala 10	Ile	Met	Ala	Asp	Pro 15	Asp
Pro	Arg	Tyr	Pro 20	Arg	Ser	Ser	Ile	Glu 25	Asp	Asp	Phe	Asn	Tyr 30	Gly	Ser
Ser	Val	Ala 35	Ser	Ala	Thr	Val	His 40	Ile	Arg	Met	Ala	Phe 45	Leu	Arg	Lys
Val	Tyr 50	Ser	Ile	Leu	Ser	Leu 55	Gln	Val	Leu	Leu	Thr 60	Thr	Val	Thr	Ser
Thr 65	Val	Phe	Leu	Tyr	Phe 70	Glu	Ser	Val	Arg	Thr 75	Phe	Val	His	Glu	Ser 80
Pro	Ala	Leu	Ile	Leu 85	Leu	Phe	Ala	Leu	Gly 90	Ser	Leu	Gly	Leu	Ile 95	Phe
Ala	Leu	Thr	Leu 100	Asn	Arg	His	Lys	Tyr 105	Pro	Leu	Asn	Leu	Tyr 110	Leu	Leu
Phe	Gly	Phe 115	Thr	Leu	Leu	Glu	Ala 120	Leu	Thr	Val	Ala	Val 125	Val	Val	Thr
Phe	Tyr 130	Asp	Val	Tyr	Ile	Ile 135	Leu	Gln	Ala	Phe	Ile 140	Leu	Thr	Thr	Thr
Val 145	Phe	Phe	Gly	Leu	Thr 150	Val	Tyr	Thr	Leu	Gln 155	Ser	Lys	Lys	Asp	Phe 160

Ser	Lys	Phe	Gly	Ala 165	Gly	Leu	Phe	Ala	Leu 170	Leu	Trp	Ile	Leu	Cys 175	Leu
Ser	Gly	Phe	Leu 180	Lys	Phe	Phe	Phe	Tyr 185	Ser	Glu	Ile	Met	Glu 190	Leu	Val
Leu	Ala	Ala 195	Ala	Gly	Ala	Leu	Leu 200	Phe	Cys	Gly	Phe	Ile 205	Ile	Tyr	Asp
Thr	His 210	Ser	Leu	Met	His	Lys 215	Leu	Ser	Pro	Glu	Glu 220	Tyr	Val	Leu	Ala
Ala 225	Ile	Ser	Leu	Tyr	Leu 230	Asp	Ile	Ile	Asn	Leu 235	Phe	Leu	His	Leu	Leu 240
Arg	Phe	Leu	Glu	Ala 245	Val	Asn	Lys	Lys							

<210> 254
 <211> 151
 <212> PRT
 <213> homo sapiens
 <400> 254

Arg 1	Lys	Lys	Gly	Glu 5	Thr	Glu	Arg	Glu	Leu 10	Ser	Ala	Ser	Thr	Gln 15	Thr
Leu	Ser	His	Leu 20	Gln	Gly	His	Leu	Pro 25	Ser	Trp	Pro	Arg	Pro 30	Ala	Pro
Thr	Val	Thr 35	Ser	Ala	Ser	Arg	Arg 40	Phe	Ile	Ile	Lys	Lys 45	Asn	Gln	Lys
Gln	Ser 50	Gln	Asn	Gln	Asn	Lys 55	Ile	Gln	Lys	Glu	Lys 60	Thr	Trp	Gly	Asn
Gly 65	Met	Arg	Lys	Arg	Gly 70	Gly	Glu	Glu	Gly	Arg 75	Arg	Ala	Gly	Leu	Trp 80
Met	His	Asn	Ser	Arg 85	Ala	Arg	Gly	Leu	Gly 90	Arg	Lys	Ile	Pro	Gln 95	Arg
Pro	Ala	Ala	Cys 100	Val	Ala	Leu	Ala	Arg 105	His	Val	Val	Phe	Gly 110	Gly	Arg
Leu	Pro	Ile 115	His	Pro	Val	Glu	Ile 120	Leu	Val	Ala	Gly	Leu 125	Leu	Gly	Gly
Val	Lys 130	Pro	Val	Ser	Asp	Arg 135	Gln	Ala	Gly	Lys	Gly 140	Leu	Gly	Asp	Gly

Gly Cys Gly Arg Glu Arg Val
145 150

<210> 255
<211> 150
<212> PRT
<213> homo sapiens

<400> 255

Arg 1	His	Ala	Gly	Gly 5	Gly	Ala	Leu	Gly	Asn 10	Leu	Pro	Pro	Gln	Pro 15	Pro
Gly	Ser	Gly	Val 20	Met	His	Pro	Glu	Thr 25	Cys	Pro	Ser	Thr	Phe 30	Leu	Ala
Ser	Pro	Leu 35	Pro	His	Ser	Ile	Ala 40	Pro	Gly	Leu	Phe	Leu 45	Leu	Asp	Phe
Val	Leu 50	Val	Leu	Ala	Leu	Phe 55	Leu	Ile	Phe	Phe	Tyr 60	Tyr	Glu	Ser	Pro
Gly 65	Arg	Arg	Gly	Asp	Ser 70	Gly	Ser	Trp	Pro	Gly 75	Pro	Gly	Arg	Gln	Val 80
Ala	Leu	Glu	Met	Gly 85	Lys	Cys	Leu	Cys	Arg 90	Gly	Ala	Glu	Leu	Ser 95	Leu
Cys	Phe	Ser	Phe 100	Phe	Pro	Leu	Leu	Leu 105	Pro	Leu	His	Thr	Pro 110	Val	Ala
Gly	Arg	Asn 115	Leu	Gly	Phe	Pro	Glu 120	Ser	Leu	Gly	Val	Pro 125	Pro	Phe	Leu
Pro	His 130	Pro	Gly	Gly	Thr	Pro 135	Arg	Ala	Pro	Gly	Leu 140	Phe	Leu	Leu	Leu
Phe 145	Ser	Phe	Trp	Ala	Val 150										

<210> 256
<211> 275
<212> PRT
<213> homo sapiens

<400> 256

Gly 1	Arg	Pro	Gly	Gln 5	Ser	Pro	Ala	Gly	Ala 10	Glu	Glu	Pro	Gly	Pro 15	Arg
Asp	Ser	Ser	Ala 20	Val	Ile	Thr	Gln	Ile 25	Ser	Lys	Glu	Glu	Ala 30	Arg	Gly
Pro	Leu	Arg 35	Gly	Lys	Gly	Asp	Gln 40	Lys	Ser	Ala	Ala	Ser 45	Gln	Lys	Pro

Arg	Ser 50	Arg	Gly	Ile	Leu	His 55	Ser	Leu	Phe	Cys	Cys 60	Val	Cys	Arg	Asp
Asp 65	Gly	Glu	Ala	Leu	Pro 70	Ala	His	Ser	Gly	Ala 75	Pro	Leu	Leu	Val	Glu 80
Glu	Asn	Gly	Ala	Ile 85	Pro	Lys	Thr	Pro	Val 90	Gln	Tyr	Leu	Leu	Pro 95	Glu
Ala	Lys	Ala	Gln 100	Asp	Ser	Asp	Lys	Ile 105	Cys	Val	Val	Ile	Asp 110	Leu	Asp
Glu	Thr	Leu 115	Val	His	Ser	Ser	Phe 120	Lys	Pro	Val	Asn	Asn 125	Ala	Asp	Phe
Ile	Ile 130	Pro	Val	Glu	Ile	Asp 135	Gly	Val	Val	His	Gln 140	Val	Tyr	Val	Leu
Lys 145	Arg	Pro	His	Val	Asp 150	Glu	Phe	Leu	Gln	Arg 155	Met	Gly	Glu	Leu	Phe 160
Glu	Cys	Val	Leu	Phe 165	Thr	Ala	Ser	Leu	Ala 170	Lys	Tyr	Ala	Asp	Pro 175	Val
Ala	Asp	Leu	Leu 180	Asp	Lys	Trp	Gly	Ala 185	Phe	Arg	Ala	Arg	Leu 190	Phe	Arg
Glu	Ser	Cys 195	Val	Phe	His	Arg	Gly 200	Asn	Tyr	Val	Lys	Asp 205	Leu	Ser	Arg
Leu	Gly 210	Arg	Asp	Leu	Arg	Arg 215	Val	Leu	Ile	Leu	Asp 220	Asn	Ser	Pro	Ala
Ser 225	Tyr	Val	Phe	His	Pro 230	Asp	Asn	Ala	Val	Pro 235	Val	Ala	Ser	Trp	Phe 240
Asp	Asn	Met	Ser	Asp 245	Thr	Glu	Leu	His	Asp 250	Leu	Leu	Pro	Phe	Phe 255	Glu
Gln	Leu	Ser	Arg 260	Val	Asp	Asp	Val	Tyr 265	Ser	Val	Leu	Arg	Gln 270	Pro	Arg
Pro	Gly	Ser 275													

<210> 257
 <211> 138
 <212> PRT
 <213> homo sapiens

<400> 257

Met 1	Phe	Tyr	Leu	Ala 5	Ala	Ala	Val	Ser	Asp 10	Phe	Tyr	Val	Pro	Val 15	Ser
Glu	Met	Pro	Glu 20	His	Lys	Ile	Gln	Ser 25	Ser	Gly	Gly	Pro	Leu 30	Gln	Ile
Thr	Met	Lys 35	Met	Val	Pro	Lys	Leu 40	Leu	Ser	Pro	Leu	Val 45	Lys	Asp	Trp
Ala	Pro 50	Lys	Ala	Phe	Ile	Ile 55	Ser	Phe	Lys	Leu	Glu 60	Thr	Asp	Pro	Ala
Ile 65	Val	Ile	Asn	Arg	Ala 70	Arg	Lys	Ala	Leu	Glu 75	Ile	Tyr	Gln	His	Gln 80
Val	Val	Val	Ala	Asn 85	Ile	Leu	Glu	Ser	Arg 90	Gln	Ser	Phe	Val	Phe 95	Ile
Val	Thr	Lys	Asp 100	Ser	Glu	Thr	Lys	Leu 105	Leu	Leu	Ser	Glu	Glu 110	Glu	Ile
Glu	Lys	Gly 115	Val	Glu	Ile	Glu	Glu 120	Lys	Ile	Val	Asp	Asn 125	Leu	Gln	Ser
Arg	His 130	Thr	Ala	Phe	Ile	Gly 135	Asp	Arg	Asn						

<210> 258

<211> 237

<212> PRT

<213> homo sapiens

<400> 258

Pro 1	Tyr	Arg	Gln	Gly 5	Cys	Pro	Gly	Ala	Ala 10	Gly	Gln	Ala	Pro	Gly 15	Ala
Pro	Pro	Gly	Ser 20	Tyr	Tyr	Pro	Gly	Leu 25	Pro	Ser	Gly	Thr	Pro 30	Gly	Gly
Pro	Tyr	Gly 35	Gly	Ala	Ala	Pro	Gly 40	Gly	Pro	Tyr	Gly	Gln 45	Pro	Pro	Pro
Ser	Ser 50	Tyr	Gly	Ala	Gln	Gln 55	Pro	Gly	Leu	Tyr	Gly 60	Gln	Gly	Gly	Ala
Pro 65	Pro	Asn	Val	Asp	Pro 70	Glu	Ala	Tyr	Ser	Trp 75	Phe	Gln	Ser	Val	Asp 80
Ser	Asp	His	Ser	Gly 85	Tyr	Ile	Ser	Met	Lys 90	Glu	Leu	Lys	Gln	Ala 95	Leu

Val	Asn	Cys	Asn 100	Trp	Ser	Ser	Phe	Asn 105	Asp	Glu	Thr	Cys	Leu 110	Met	Met
Ile	Asn	Met 115	Phe	Asp	Lys	Thr	Lys 120	Ser	Gly	Arg	Ile	Asp 125	Val	Tyr	Gly
Phe	Ser 130	Ala	Leu	Trp	Lys	Phe 135	Ile	Gln	Gln	Trp	Lys 140	Asn	Leu	Phe	Gln
Gln 145	Tyr	Asp	Arg	Asp	Arg 150	Ser	Gly	Ser	Ile	Ser 155	Tyr	Thr	Glu	Leu	Gln 160
Gln	Ala	Leu	Ser	Gln 165	Met	Gly	Tyr	Asn	Leu 170	Ser	Pro	Gln	Phe	Thr 175	Gln
Leu	Leu	Val	Ser 180	Arg	Tyr	Cys	Pro	Arg 185	Ser	Ala	Asn	Pro	Ala 190	Met	Gln
Leu	Asp	Arg 195	Phe	Ile	Gln	Val	Cys 200	Thr	Gln	Leu	Gln	Val 205	Leu	Thr	Glu
Ala	Phe 210	Arg	Glu	Lys	Asp	Thr 215	Ala	Val	Gln	Gly	Asn 220	Ile	Arg	Leu	Ser
Phe 225	Glu	Asp	Phe	Val	Thr 230	Met	Thr	Ala	Ser	Arg 235	Met	Leu			
<210> 259															
<211> 110															
<212> PRT															
<213> homo sapiens															
<400> 259															
Thr 1	Asn	Ile	Cys	Leu 5	Leu	Ser	Gly	Ala	Ser 10	Pro	Lys	Val	Thr	Asn 15	Gly
Trp	Ala	Gln	Ile 20	Asn	Phe	Ser	Phe	Ala 25	Ser	His	Arg	Val	Ala 30	His	Cys
Gly	Lys	Pro 35	Glu	Leu	Val	Arg	Thr 40	Pro	Val	Cys	Val	Phe 45	Leu	Ile	His
Thr	Asn 50	His	Asn	Lys	Gln	Val 55	Cys	Thr	His	Leu	Tyr 60	Glu	Pro	His	Ala
Lys 65	Thr	Arg	His	Ser	Gln 70	Arg	Ser	Val	Thr	Arg 75	Val	Gln	Gln	Arg	Asn 80
Ser	Arg	Phe	Asp	Gln 85	Asn	Arg	Pro	Cys	Cys 90	Leu	Leu	Asn	Cys	Gln 95	Leu

Pro Leu Lys Asn Leu Gln Lys Lys Gly His Tyr Lys Asn Ser
 100 105 110

<210> 260
 <211> 33
 <212> PRT
 <213> homo sapiens

<400> 260

Phe	Val	Lys	Ile	Leu	Lys	Phe	Gly	Pro	Leu	Arg	Ile	Ile	Leu	Asn	Glu
1				5					10					15	
Ile	Tyr	Arg	Leu	Thr	Cys	Glu	Asn	Ile	Phe	His	Arg	Leu	Ser	Leu	Gly
			20					25					30		
Leu	Phe	Ile	Arg	Lys	Leu	Phe	Val	Cys	Pro	Pro	Val	Gly	Thr	Phe	Gly
		35					40					45			
Tyr	Leu	Ile	Leu	Pro	Phe	Gln	Ile	Val	Lys	Ala	His	Arg	Gly	Val	Phe
	50					55					60				
Trp	Asn	His	Leu	Leu	Ser	His	Phe	Leu	Lys	Ser	Tyr	Ser	Ile	Val	Ser
65					70					75					80

Val Asn Ile

<210> 261
 <211> 196
 <212> PRT
 <213> homo sapiens

<400> 261

Pro	Gln	Thr	Thr	Gln	Cys	Val	Arg	Arg	Ala	Gly	Leu	Trp	Val	Asn	Ser
1				5					10					15	
His	Ile	His	Thr	Gln	Gly	Arg	Gly	Lys	His	Thr	Gln	Val	Gln	Ser	Ser
			20					25					30		
Gln	Trp	Cys	Arg	Pro	Asp	Leu	Leu	Ser	Arg	Gly	Cys	Tyr	Gly	Cys	Pro
		35					40					45			
Ser	Ala	Ser	Pro	Glu	Gln	Pro	Gly	Gln	Pro	Ala	Pro	Pro	Pro	Arg	Leu
	50					55					60				
Xxx	Gln	Glu	Gly	Glu	Leu	Cys	Pro	Gly	Glu	Glu	Thr	Asp	Arg	Leu	Gly
65					70					75					80
Asp	Lys	Thr	Pro	Ile	Ala	Gly	Thr	Cys	Thr	Ala	Ala	Ala	Thr	Ala	Pro
				85					90					95	
Arg	Thr	Gly	His	Gly	Asp	Gly	Thr	Gly	Arg	Glu	Pro	His	Cys	Pro	Leu
			100					105					110		

Ser	Val	Cys 115	Leu	Trp	Phe	Cys	Pro 120	Gly	Pro	Ala	His	Leu 125	Glu	Pro	Arg
Gln	Thr 130	Gly	Gly	Ile	Glu	Gln 135	Gly	Pro	Gly	Pro	Asp 140	Ser	Pro	Leu	Ala
Arg 145	Cys	Asp	Trp	Lys	Arg 150	Leu	Met	Pro	Gly	Gln 155	His	Gln	Ala	Phe	Cys 160
Lys	Ser	Gln	Ser	Gln 165	Cys	Ala	Glu	Ser	Ala 170	Ser	Thr	Ala	Cys	Ala 175	Val
Ala	Pro	Gln	Asp 180	Glu	Val	Thr	Ser	Arg 185	Thr	Gly	Gly	Phe	Met 190	Gln	Thr
His	Arg	His 195	Cys												

<210> 262
 <211> 190
 <212> PRT
 <213> homo sapiens
 <400> 262

Asp 1	Gln	Leu	Gly	Ser 5	Gly	Gly	His	Phe	Ser 10	Leu	His	Arg	Leu	Pro 15	Glu
Gln	Thr	Glu	Glu 20	Ser	Ser	Leu	Ile	Val 25	Ala	Glu	Pro	Ser	Leu 30	Ser	Pro
Ser	Ala	Val 35	Ser	Val	Cys	Leu	His 40	Lys	Pro	Ser	Cys	Pro 45	Gly	Arg	Asp
Phe	Ile 50	Leu	Arg	Ser	His	Ser 55	Thr	Gly	Arg	Ala	Gly 60	Thr	Phe	Cys	Thr
Leu 65	Ala	Leu	Gly	Leu	Ala 70	Glu	Gly	Leu	Val	Leu 75	Pro	Trp	His	Gln	Pro 80
Leu	Pro	Val	Thr	Ser 85	Gly	Gln	Arg	Ala	Val 90	Trp	Thr	Trp	Ala	Leu 95	Leu
Asn	Ala	Thr	Cys 100	Leu	Pro	Gly	Leu	Gln 105	Val	Gly	Arg	Thr	Arg 110	Thr	Glu
Pro	Gln	Ala 115	His	Thr	Glu	Gly	Ala 120	Val	Trp	Leu	Pro	Ala 125	Cys	Pro	Ile
Pro	Met 130	Pro	Arg	Pro	Arg	Gly 135	Cys	Gly	Cys	Cys	Cys	Ala	Cys	Pro	Cys

Asp 145	Gly	Ser	Leu	Val	Ser 150	Gln	Pro	Val	Ser	Phe 155	Leu	Pro	Arg	Ala	Glu 160
Leu	Pro	Phe	Leu	Kxx 165	Glu	Ser	Gly	Arg	Arg 170	Cys	Arg	Leu	Ser	Trp 175	Leu
Leu	Trp	Gly	Ser 180	Arg	Gly	Thr	Ala	Ile 185	Thr	Pro	Pro	Gly	Gln 190		

<210> 263
 <211> 244
 <212> PRT
 <213> homo sapiens
 <400> 263

Glu 1	Lys	Met	Glu	Ala 5	Phe	Gly	Glu	Gly	Ala 10	Gly	Trp	Glu	Asp	Phe 15	Phe
Ser	Thr	Gln	Thr 20	Leu	Thr	Phe	Gln	Ser 25	Ile	Leu	Gln	Met	Lys 30	Asn	Ala
Asp	Tyr	Phe 35	Ser	Asn	Tyr	Val	Thr 40	Glu	Asp	Phe	Thr	Thr 45	Tyr	Ile	Asn
Arg	Lys 50	Arg	Lys	Asn	Asn	Cys 55	His	Gly	Asn	His	Ile 60	Glu	Met	Gln	Ala
Met 65	Ala	Glu	Met	Tyr	Asn 70	Arg	Pro	Val	Glu	Val 75	Tyr	Gln	Tyr	Ser	Thr 80
Glu	Pro	Ile	Asn	Thr 85	Phe	His	Gly	Ile	His 90	Gln	Asn	Glu	Asp	Glu 95	Pro
Ile	Arg	Val	Ser 100	Tyr	His	Arg	Asn	Ile 105	His	Tyr	Asn	Ser	Val 110	Val	Asn
Pro	Asn	Lys 115	Ala	Thr	Ile	Gly	Val 120	Gly	Leu	Gly	Leu	Pro 125	Ser	Phe	Lys
Pro	Gly 130	Phe	Ala	Glu	Gln	Ser 135	Leu	Met	Lys	Asn	Ala 140	Ile	Lys	Thr	Ser
Glu 145	Glu	Ser	Trp	Ile	Glu 150	Gln	Gln	Met	Leu	Glu 155	Asp	Lys	Lys	Arg	Ala 160
Thr	Asp	Trp	Glu	Ala 165	Thr	Asn	Glu	Ala	Ile 170	Glu	Glu	Gln	Val	Ala 175	Arg
Glu	Ser	Tyr	Leu 180	Gln	Trp	Leu	Arg	Asp 185	Gln	Glu	Lys	Gln	Ala 190	Arg	Gln

Val	Arg	Gly 195	Pro	Ser	Gln	Pro	Arg 200	Lys	Ala	Ser	Ala	Thr 205	Cys	Ser	Ser
Ala	Thr 210	Ala	Ala	Ala	Ser	Ser 215	Gly	Leu	Glu	Glu	Trp 220	Thr	Ser	Arg	Ser
Pro 225	Arg	Gln	Gly	Val	Gln 230	Pro	Arg	His	Leu	Ser 235	Thr	Leu	Ser	Cys	Met 240
Leu Asn Trp Ala															
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<211> 220															
<212> PRT															
<213> homo sapiens															
<400> 264															
Gly 1	Phe	Arg	Pro	Ala 5	Arg	Cys	Asp	Pro	Val 10	Pro	Leu	Pro	Thr	Thr 15	Arg
Ser	Val	Ala	Gly 20	Leu	Pro	Val	Gly	Arg 25	Val	Arg	Gln	Leu	Ser 30	Arg	Pro
Leu	Leu	Gly 35	Pro	Asp	Thr	Gly	Ser 40	Val	Ala	Asn	Ile	Phe 45	Lys	Gly	Leu
Val	Ile 50	Leu	Pro	Glu	Met	Ser 55	Leu	Val	Ile	Arg	Asn 60	Leu	Gln	Arg	Val
Ile 65	Pro	Ile	Arg	Arg	Ala 70	Pro	Leu	Arg	Ser	Lys 75	Ile	Glu	Ile	Val	Arg 80
Arg	Ile	Leu	Gly	Val 85	Gln	Lys	Phe	Asp	Leu 90	Gly	Ile	Ile	Cys	Val 95	Asp
Asn	Lys	Asn	Ile 100	Gln	His	Ile	Asn	Arg 105	Ile	Tyr	Arg	Asp	Arg 110	Asn	Val
Pro	Thr	Asp 115	Val	Leu	Ser	Phe	Pro 120	Phe	His	Glu	His	Leu 125	Lys	Ala	Gly
Glu	Phe 130	Pro	Gln	Pro	Asp	Phe 135	Pro	Asp	Asp	Tyr	Asn 140	Leu	Gly	Asp	Ile
Phe 145	Leu	Gly	Val	Glu	Tyr 150	Ile	Phe	His	Gln	Cys 155	Lys	Glu	Asn	Glu	Asp 160
Tyr	Asn	Asp	Val	Leu 165	Thr	Val	Thr	Ala	Thr 170	His	Gly	Leu	Cys	His 175	Leu

Leu	Gly	Phe	Thr	His	Gly	Thr	Glu	Ala	Glu	Trp	Gln	Gln	Met	Phe	Gln
			130					135					130		

Lys	Glu	Lys	Ala	Val	Leu	Asp	Glu	Leu	Gly	Arg	Arg	Thr	Gly	Thr	Arg
		195					200					205			

Leu	Gln	Ala	Leu	Thr	Arg	Gly	Leu	Phe	Gly	Gly	Ser
	210					215					220

<210> 265

<211> 108

<212> PRT

<213> homo sapiens

<400> 265

Phe	Phe	Phe	Leu	Arg	Ser	Phe	Val	Ile	Tyr	Leu	Cys	Ala	Thr	Pro	Ala
1				5					10					15	

Pro	Arg	Ser	Leu	His	Pro	Ser	Arg	Val	Pro	Leu	Ser	Glu	Gly	Thr	Arg
			20					25					30		

Pro	Ser	Ala	Pro	Ser	Glu	Glu	Ala	Pro	Gly	Gln	Gly	Leu	Gln	Pro	Gly
		35					40					45			

Pro	Arg	Ala	Ser	Ala	Gln	Leu	Val	Gln	His	Arg	Leu	Leu	Leu	Leu	Glu
	50					55					60				

His	Leu	Leu	Pro	Leu	Cys	Leu	Arg	Ala	Val	Cys	Glu	Ser	Gln	Gln	Val
65					70					75					80

Thr	Glu	Ser	Val	Gly	Gly	Arg	His	Ser	Gln	Asp	Val	Ile	Val	Ile	Phe
				85					90					95	

Ile	Phe	Phe	Thr	Leu	Met	Glu	Asp	Ile	Leu	His	Ser
			100					105			

<210> 266

<211> 371

<212> PRT

<213> homo sapiens

<400> 266

Met	Ser	Phe	Arg	Lys	Val	Asn	Ile	Ile	Ile	Leu	Val	Leu	Ala	Val	Ala
1				5					10					15	

Leu	Phe	Leu	Leu	Val	Leu	His	His	Asn	Phe	Leu	Ser	Leu	Ser	Ser	Leu
			20					25					30		

Leu	Arg	Asn	Glu	Val	Thr	Asp	Ser	Gly	Ile	Val	Gly	Pro	Gln	Pro	Ile
		35					40					45			

Asp	Phe	Val	Pro	Asn	Ala	Leu	Arg	His	Ala	Val	Asp	Gly	Arg	Gln	Glu
	50					55					60				

Glu 65	Ile	Pro	Val	Val	Ile 70	Ala	Ala	Ser	Glu	Asp 75	Arg	Leu	Gly	Gly	Ala 80
Ile	Ala	Ala	Ile	Asn 85	Ser	Ile	Gln	His	Asn 90	Thr	Arg	Ser	Asn	Val 95	Ile
Phe	Tyr	Ile	Val 100	Thr	Leu	Asn	Asn	Thr 105	Ala	Asp	His	Leu	Arg 110	Ser	Trp
Leu	Asn	Ser 115	Asp	Ser	Leu	Lys	Ser 120	Ile	Arg	Tyr	Lys	Ile 125	Val	Asn	Phe
Asp	Pro 130	Lys	Leu	Leu	Glu	Gly 135	Lys	Val	Lys	Glu	Asp 140	Pro	Asp	Gln	Gly
Glu 145	Ser	Met	Lys	Pro	Leu 150	Thr	Phe	Ala	Arg	Phe 155	Tyr	Leu	Pro	Ile	Leu 160
Val	Pro	Ser	Ala	Lys 165	Lys	Ala	Ile	Tyr	Met 170	Asp	Asp	Asp	Val	Ile 175	Val
Gln	Gly	Asp	Ile 180	Leu	Ala	Leu	Tyr	Asn 185	Thr	Ala	Leu	Lys	Pro 190	Gly	His
Ala	Ala	Ala 195	Phe	Ser	Glu	Asp	Cys 200	Asp	Ser	Ala	Ser	Thr 205	Lys	Val	Val
Ile	Arg 210	Gly	Ala	Gly	Asn	Gln 215	Tyr	Asn	Tyr	Ile	Gly 220	Tyr	Leu	Asp	Tyr
Lys 225	Lys	Glu	Arg	Ile	Arg 230	Lys	Leu	Ser	Met	Lys 235	Ala	Ser	Thr	Cys	Ser 240
Phe	Asn	Pro	Gly	Val 245	Phe	Val	Ala	Asn	Leu 250	Thr	Glu	Trp	Lys	Arg 255	Gln
Asn	Ile	Thr	Asn 260	Gln	Leu	Glu	Lys	Trp 265	Met	Lys	Leu	Asn	Val 270	Glu	Glu
Gly	Leu	Tyr 275	Ser	Arg	Thr	Leu	Ala 280	Gly	Ser	Ile	Thr	Thr 285	Pro	Pro	Leu
Leu	Ile 290	Val	Phe	Tyr	Gln	Gln 295	His	Ser	Thr	Ile	Asp 300	Pro	Met	Trp	Asn
Val 305	Arg	His	Leu	Gly	Ser 310	Ser	Ala	Gly	Lys	Arg 315	Tyr	Ser	Pro	Gln	Phe 320

Val	Lys	Ala	Ala	Lys 325	Leu	Leu	His	Trp	Asn 330	Gly	His	Leu	Lys	Pro 335	Trp
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Gly	Arg	Thr	Ala 340	Ser	Tyr	Thr	Asp	Val 345	Trp	Glu	Lys	Trp	Tyr 350	Ile	Pro
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Asp	Pro	Thr 355	Gly	Lys	Phe	Asn	Leu 360	Ile	Arg	Arg	Tyr	Thr 365	Glu	Ile	Ser
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Asn	Ile	Lys
	370	

<210> 267

<211> 72

<212> PRT

<213> homo sapiens

<400> 267

Met 1	Cys	Leu	Leu	Ser 5	Gln	Gln	Ser	Pro	Ala 10	Ala	Ser	Ser	Leu	Glu 15	Gly
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Ala	Ile	Trp	Arg 20	Arg	Ala	Gly	Thr	Gln 25	Thr	Arg	Ala	Leu	Asp 30	Ala	Ile
-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----

Leu	Tyr	His 35	Pro	Gln	Gln	Ser	His 40	Leu	Val	Gly	Ser	Thr 45	Ala	Leu	Gly
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Leu	Thr 50	Leu	Pro	Leu	Leu	Tyr 55	Pro	Arg	Glu	Pro	Glu 60	Ala	Gln	Gly	Trp
-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----

Lys 65	Asp	Pro	Val	Ala	Gly 70	Gly	Gly
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<210> 268

<211> 137

<212> PRT

<213> homo sapiens

<400> 268

Val 1	Pro	Pro	Cys	Pro 5	Gln	Leu	Arg	Glu	Leu 10	Cys	Pro	Gly	Val	Asn 15	Asn
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Gln	Pro	Tyr	Leu 20	Cys	Glu	Ser	Gly	His 25	Cys	Cys	Gly	Glu	Thr 30	Gly	Cys
-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----

Cys	Thr	Tyr 35	Tyr	Tyr	Glu	Leu	Trp 40	Trp	Phe	Trp	Leu	Leu 45	Trp	Thr	Val
-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----

Leu	Ile 50	Leu	Phe	Ser	Cys	Cys 55	Cys	Ala	Phe	Arg	His 60	Arg	Arg	Ala	Lys
-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----

Leu 65	Arg	Leu	Gln	Gln	Gln 70	Gln	Arg	Gln	Val	Glu 75	Ile	Asn	Leu	Leu	Ala 80
-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------

Tyr	His	Gly	Ala	Cys 35	His	Gly	Ala	Gly	Pro 90	Phe	Pro	Thr	Gly	Ser 95	Leu
Leu	Asp	Leu	Arg 100	Phe	Leu	Ser	Thr	Phe 105	Lys	Pro	Pro	Ala	Tyr 110	Glu	Asp
Val	Val	His 115	Arg	Pro	Gly	Thr	Thr 120	Ser	Pro	Pro	Leu	Tyr 125	Cys	Gly	Pro
Lys	Ala 130	Pro	Leu	Glu	Val	Val 135	Ser	Ser							

<210> 269
 <211> 308
 <212> PRT
 <213> homo sapiens
 <400> 269

Lys 1	His	Ala	Thr	Glu 5	Gln	Glu	Lys	Thr	Glu 10	Glu	Gly	Leu	Gly	Pro 15	Asn
Val	Lys	Gly	Ile 20	Val	Thr	Met	Leu	Met 25	Leu	Met	Leu	Leu	Met 30	Met	Phe
Ala	Val	His 35	Cys	Thr	Trp	Val	Thr 40	Ser	Asn	Ala	Tyr	Ser 45	Ser	Pro	Ser
Val	Val 50	Leu	Ala	Ser	Tyr	Asn 55	His	Asp	Gly	Thr	Arg 60	Asn	Ile	Leu	Asp
Asp 65	Phe	Arg	Glu	Ala	Tyr 70	Phe	Trp	Leu	Arg	Gln 75	Asn	Thr	Asp	Glu	His 80
Ala	Arg	Val	Met	Ser 85	Trp	Trp	Asp	Tyr	Gly 90	Tyr	Gln	Ile	Ala	Gly 95	Met
Ala	Asn	Arg	Thr 100	Thr	Leu	Val	Asp	Asn 105	Asn	Thr	Trp	Asn	Asn 110	Ser	His
Ile	Ala	Leu 115	Val	Gly	Lys	Ala	Met 120	Ser	Ser	Asn	Glu	Thr 125	Ala	Ala	Tyr
Lys	Ile 130	Met	Arg	Thr	Leu	Asp 135	Val	Asp	Tyr	Val	Leu 140	Val	Ile	Phe	Gly
Gly 145	Val	Ile	Gly	Tyr	Ser 150	Gly	Asp	Asp	Ile	Asn 155	Lys	Phe	Leu	Trp	Met 160
Val	Arg	Ile	Ala	Glu 165	Gly	Glu	His	Pro	Lys 170	Asp	Ile	Arg	Glu	Ser 175	Asp

Tyr	Phe	Thr	Pro 130	Gln	Gly	Glu	Phe	Arg 185	Val	Asp	Lys	Ala	Gly 190	Ser	Pro
Thr	Leu	Leu 195	Asn	Cys	Leu	Met	Tyr 200	Lys	Met	Ser	Tyr	Tyr 205	Arg	Phe	Gly
Glu	Met 210	Gln	Leu	Asp	Phe	Arg 215	Thr	Pro	Pro	Gly	Phe 220	Asp	Arg	Thr	Arg
Asn 225	Ala	Glu	Ile	Gly	Asn 230	Lys	Asp	Ile	Lys	Phe 235	Lys	His	Leu	Glu	Glu 240
Ala	Phe	Thr	Ser	Glu 245	His	Trp	Leu	Val	Arg 250	Ile	Tyr	Lys	Val	Lys 255	Ala
Pro	Asp	Asn	Arg 260	Glu	Thr	Leu	Asp	His 265	Lys	Pro	Arg	Val	Thr 270	Asn	Ile
Phe	Pro	Lys 275	Gln	Lys	Tyr	Leu	Ser 280	Lys	Lys	Thr	Thr	Lys 285	Arg	Lys	Arg
Gly	Tyr 290	Ile	Lys	Asn	Lys	Leu 295	Val	Phe	Lys	Lys	Gly 300	Lys	Lys	Ile	Ser
Lys 305	Lys	Thr	Val												

<210> 270
 <211> 113
 <212> PRT
 <213> homo sapiens

<400> 270

Ile 1	Pro	Glu	Asp	Pro 5	His	Ile	Asp	Glu	Ser 10	Lys	Ala	Lys	His	Gln 15	Ala
Ile	Ile	Met	Ser 20	Thr	Ser	Leu	Arg	Val 25	Ser	Pro	Ser	Ile	His 30	Gly	Tyr
His	Phe	Asp 35	Thr	Ala	Ser	Arg	Lys 40	Lys	Ala	Val	Gly	Asn 45	Ile	Phe	Glu
Asn	Thr 50	Asp	Gln	Glu	Ser	Leu 55	Glu	Arg	Leu	Phe	Arg 60	Asn	Ser	Gly	Asp
Lys 65	Lys	Ala	Glu	Glu	Arg 70	Ala	Lys	Ile	Ile	Phe 75	Ala	Ile	Asp	Gln	Asp 80
Val	Glu	Glu	Lys	Thr 85	Arg	Ala	Leu	Met	Ala 90	Leu	Lys	Lys	Arg	Thr 95	Lys

345

<400> 271

<400> 272

<400> 273

Cys 1	Pro	Pro	Val	Lys 5	Ala	Leu	Ile	Glu	His 10	Glu	Met	Lys	Asn	Gly 15	Ile
Pro	Ala	Asn	Arg	Ile	Val	Leu	Gly	Gly	Phe	Ser	Gln	Gly	Gly	Ala	Leu

20

112

25

30

Ser	Leu	Tyr 35	Thr	Ala	Leu	Thr	Cys 40	Pro	His	Pro	Leu	Ala 45	Gly	Ile	Val
Ala	Leu 50	Ser	Cys	Trp	Leu	Pro 55	Leu	His	Arg	Ala	Phe 60	Pro	Gln	Ala	Ala
Asn 65	Gly	Ser	Ala	Lys	Asp 70	Leu	Ala	Ile	Leu	Gln 75	Cys	His	Gly	Glu	Leu 80
Asp	Pro	Met	Val	Pro 85	Val	Arg	Phe	Gly	Ala 90	Leu	Thr	Ala	Glu	Lys 95	Leu
Arg	Ser	Val	Val 100	Thr	Pro	Ala	Arg	Val 105	Gln	Phe	Lys	Thr	Tyr 110	Pro	Gly
Val	Met	His 115	Ser	Ser	Cys	Pro	Gln 120	Glu	Met	Ala	Ala	Val 125	Lys	Glu	Phe
Leu	Glu 130	Lys	Leu	Leu	Pro	Pro 135	Val								

<210> 274

<211> 91

<212> PRT

<213> homo sapiens

<400> 274

Met 1	Trp	Val	Leu	Lys 5	Leu	Asp	Arg	Asn	Thr 10	Met	Asn	Val	Lys	Ile 15	Pro
Pro	Ile	Phe	Cys 20	Ser	Lys	Lys	Lys	Asn 25	Pro	Lys	Asn	Lys	Lys 30	Thr	Asn
Lys	Lys	Pro 35	Arg	Met	Phe	Phe	Gly 40	Ile	Thr	Glu	Ile	Ser 45	Gln	Thr	Trp
Val	Phe 50	Ser	Tyr	Ser	Leu	Cys 55	Thr	Phe	Phe	Gln	Val 60	Leu	Cys	Phe	Ala
Cys 65	Ser	Thr	Asp	Cys	Val 70	Ile	Leu	Ile	Phe	Ile 75	Asp	Ser	Ser	Leu	Ala 80
Met	Gln	Tyr	Pro	Cys 85	Leu	Thr	His	Arg	Cys 90	Leu					

<210> 275

<211> 75

<212> PRT

<213> homo sapiens

<400> 275

Glu 1	Thr	Ile	Ala	Asp 5	Asn	Ala	Leu	Pro	Ser 10	Thr	Glu	Ile	Thr	Leu 15	Glu
Ser	Pro	Leu	Leu 20	Gly	Ser	Phe	Asp	Cys 25	Leu	Thr	Gln	Asp	Val 30	Leu	Cys
His	Ser	Glu 35	Val	Phe	Ile	Trp	Gly 40	Arg	Ser	Leu	Tyr	Gly 45	Asp	Val	Asn
Asp	Ser 50	Val	Ser	Gly	Leu	Cys 55	Ile	Thr	Ser	His	Trp 60	Ser	Glu	Thr	Pro
Val 65	Cys	Gln	Ala	Trp	Ile 70	Leu	His	Cys	Lys	Thr 75					

<210> 276
 <211> 120
 <212> PRT
 <213> homo sapiens

<400> 276

Gly 1	Gly	Lys	Glu	Lys 5	Thr	Lys	Lys	Ile	Gln 10	Leu	Arg	Asn	Arg	Thr 15	Met
Ile	Gln	His	Leu 20	Gln	Lys	Ala	Ser	Ser 25	Ile	Ser	Leu	Lys	Lys 30	Ala	Thr
Asp	Cys	Ala 35	Ser	Ala	Gly	Ser	Glu 40	Lys	Gly	Trp	Ala	Ala 45	Gly	Thr	Ala
Ala	Ser 50	Trp	Val	Thr	Arg	Gln 55	Gln	Ser	Gln	Arg	Leu 60	Gly	Val	Arg	Leu
Arg 65	Thr	Pro	Leu	Trp	Pro 70	Glu	His	Lys	Arg	His 75	Trp	His	Cys	Lys	Leu 80
Ser	Val	Thr	Trp	Pro 85	Ser	Phe	Leu	Ser	Ser 90	Ile	Ser	Pro	Asn	Ile 95	Cys
Ala	His	Pro	Glu 100	Glu	Leu	Ser	Gly	Asn 105	Ser	Arg	Val	Arg	Ala 110	Gly	Arg
Arg	Gly	Glu 115	Arg	Thr	Lys	Arg	Glu 120								

<210> 277
 <211> 113
 <212> PRT
 <213> homo sapiens

<400> 277

Val 1	Ala	Pro	Phe	Pro 5	Ile	Pro	Thr	Gln	Glu 10	His	Arg	Gly	Gly	Gly 15	Glu
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Gly	Arg	Leu	Ser 20	Leu	Ser	Lys	Ser	Ser 25	Tyr	Leu	His	Phe	Arg 30	Arg	Lys
Ala	Glu	Thr 35	Gln	Ser	Arg	Leu	Tyr 40	Ile	Asn	Cys	Leu	Ala 45	Asp	Arg	Val
Thr	Lys 50	Thr	His	Trp	Ser	Thr 55	Cys	Ala	Phe	Ser	Ser 60	Leu	Cys	Pro	Ser
Leu 65	Ile	Gln	Thr	Ala	Thr 70	Cys	Gln	Ser	Pro	Ala 75	Thr	Leu	Lys	Thr	His 80
Gly	Gln	Leu	Pro	Gly 85	Phe	Thr	Lys	Leu	Thr 90	Ala	Phe	Leu	His	Lys 95	Val
Lys	Thr	Thr	Thr 100	Ala	Ser	Val	Cys	Gly 105	Pro	Ser	Ala	Thr	Thr 110	Lys	Leu

Ser

<210> 278
 <211> 85
 <212> PRT
 <213> homo sapiens

<400> 278

Pro 1	Tyr	Asp	Pro	Ala 5	Cys	Leu	Leu	Ile	Phe 10	Ser	Leu	Pro	Leu	Pro 15	Phe
Leu	Ser	Leu	Ser 20	Ser	Arg	Ser	His	Leu 25	Pro	Gly	Leu	Lys	Tyr 30	Phe	Val
Gly	Ile	Ala 35	Tyr	Tyr	Ile	Ile	Leu 40	Ala	Asp	Glu	Pro	Gln 45	Asp	Asn	Val
Tyr	Thr 50	His	Thr	His	Thr	Tyr 55	Thr	His	Thr	Lys	Ser 60	Gln	Leu	Leu	Lys
Ser 65	Gly	Leu	Gly	Ile	Arg 70	Leu	Leu	Cys	Pro	Val 75	Lys	Asn	Ser	Cys	Thr 80

Glu	Val	Ile	Val	Thr 85
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<210> 279
 <211> 69
 <212> PRT
 <213> homo sapiens

<400> 279

Asn 1	Ser	Phe	Lys	Val 5	Val	Lys	Lys	Leu	Ala 10	Thr	Thr	Trp	Ser	Leu 15	Ser
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Ile	Lys	Arg	Lys 20	Gln	Gly	Lys	Gln	Thr 25	His	Ser	Leu	Asp	Gln 30	Lys	Lys
Leu	Asp	Gln 35	Val	His	Trp	Asn	Gln 40	Ser	Val	Thr	Thr	Gln 45	Val	Thr	Met
Thr	Ser 50	Val	Gln	Glu	Phe	Phe 55	Thr	Gly	His	Arg	Ser 60	Leu	Ile	Pro	Ser
Pro 65	Leu	Phe	Asn	Ser											

<210> 280
 <211> 593
 <212> PRT
 <213> homo sapiens
 <400> 280

Val 1	Ser	Glu	Lys	Cys 5	Arg	Ile	Asp	Thr	Glu 10	Ile	Leu	Pro	Ser	Leu 15	Phe
Met	Arg	Cys	Thr 20	Thr	Asp	Leu	Asn	Arg 25	Lys	Asp	Lys	Phe	Pro 30	Ala	Ile
Thr	His	Leu 35	Lys	Phe	Leu	Ala	Arg 40	Asp	Met	Ser	Glu	Gln 45	Val	Leu	Leu
Cys	Ala 50	Ser	Ser	Gln	Thr	Ser 55	Ser	Ile	Val	Glu	Cys 60	Trp	Ser	Leu	Arg
Lys 65	Glu	Gly	Leu	Pro	Val 70	Asn	Asn	Ile	Phe	Gln 75	Gln	Ile	Ser	Pro	Val 80
Val	Gly	Asp	Lys	Gln 85	Pro	Thr	Ile	Leu	Lys 90	Trp	Arg	Ile	Leu	Ser 95	Ala
Thr	Asn	Asp	Leu 100	Asp	Arg	Val	Ser	Ala 105	Val	Ala	Leu	Pro	Lys 110	Leu	Pro
Ile	Ser	Leu 115	Thr	Asn	Thr	Asp	Leu 120	Lys	Val	Ala	Ser	Asp 125	Thr	Gln	Phe
Tyr	Pro 130	Gly	Leu	Gly	Leu	Ala 135	Leu	Ala	Phe	His	Asp 140	Gly	Ser	Val	His
Ile 145	Val	His	Arg	Leu	Ser 150	Leu	Gln	Thr	Met	Ala 155	Val	Phe	Tyr	Ser	Ser 160
Ala	Ala	Pro	Arg	Pro 165	Val	Asp	Glu	Pro	Ala 170	Met	Lys	Arg	Pro	Arg 175	Thr

Ala	Gly	Pro	Ala 180	Val	His	Leu	Lys	Ala 185	Met	Gln	Leu	Ser	Trp 190	Thr	Ser
Leu	Ala	Leu 195	Val	Gly	Ile	Asp	Ser 200	His	Gly	Lys	Leu	Ser 205	Val	Leu	Arg
Leu	Ser 210	Pro	Ser	Met	Gly	His 215	Pro	Leu	Glu	Val	Gly 220	Leu	Ala	Leu	Arg
His 225	Leu	Leu	Phe	Leu	Leu 230	Glu	Tyr	Cys	Met	Val 235	Thr	Gly	Tyr	Asp	Trp 240
Trp	Asp	Ile	Leu	Leu 245	His	Val	Gln	Pro	Ser 250	Met	Val	Gln	Ser	Leu 255	Val
Glu	Lys	Leu	His 260	Glu	Glu	Tyr	Thr	Arg 265	Gln	Thr	Ala	Ala	Leu 270	Gln	Gln
Val	Leu	Ser 275	Thr	Arg	Ile	Leu	Ala 280	Met	Lys	Ala	Ser	Leu 285	Cys	Lys	Leu
Ser	Pro 290	Cys	Thr	Val	Thr	Arg 295	Val	Cys	Asp	Tyr	His 300	Thr	Lys	Leu	Phe
Leu 305	Ile	Ala	Ile	Ser	Ser 310	Thr	Leu	Lys	Ser	Leu 315	Leu	Arg	Pro	His	Phe 320
Leu	Asn	Thr	Pro	Asp 325	Lys	Ser	Pro	Gly	Asp 330	Arg	Leu	Thr	Glu	Ile 335	Cys
Thr	Lys	Ile	Thr 340	Asp	Val	Asp	Ile	Asp 345	Lys	Val	Met	Ile	Asn 350	Leu	Lys
Thr	Glu	Glu 355	Phe	Val	Leu	Asp	Met 360	Asn	Thr	Leu	Gln	Ala 365	Leu	Gln	Gln
Leu	Leu 370	Gln	Trp	Val	Gly	Asp 375	Phe	Val	Leu	Tyr	Leu 380	Leu	Ala	Ser	Leu
Pro 385	Asn	Gln	Gly	Ser	Leu 390	Leu	Arg	Pro	Gly	His 395	Ser	Phe	Leu	Arg	Asp 400
Gly	Thr	Ser	Leu	Gly 405	Met	Leu	Arg	Glu	Leu 410	Met	Val	Val	Ile	Arg 415	Ile
Trp	Gly	Leu	Leu 420	Lys	Pro	Ser	Cys	Leu 425	Pro	Val	Tyr	Thr	Ala 430	Thr	Ser

Asp	Thr	Gln	Asp	Ser	Met	Ser	Leu	Leu	Phe	Arg	Leu	Leu	Thr	Lys	Leu
		435					117 440					445			
Trp	Ile	Cys	Cys	Arg	Asp	Glu	Gly	Pro	Ala	Ser	Glu	Pro	Asp	Glu	Ala
	450					455					460				
Leu	Val	Asp	Glu	Cys	Cys	Leu	Leu	Pro	Ser	Gln	Leu	Leu	Ile	Pro	Ser
465					470					475					480
Leu	Asp	Trp	Leu	Pro	Ala	Ser	Asp	Gly	Leu	Val	Ser	Arg	Leu	Gln	Pro
				485					490					495	
Lys	Gln	Pro	Leu	Arg	Leu	Gln	Phe	Gly	Arg	Ala	Pro	Thr	Leu	Pro	Gly
			500					505					510		
Ser	Ala	Ala	Thr	Leu	Gln	Leu	Asp	Gly	Leu	Ala	Arg	Ala	Pro	Gly	Gln
		515					520					525			
Pro	Lys	Ile	Asp	His	Leu	Arg	Arg	Leu	His	Leu	Gly	Ala	Cys	Pro	Thr
	530					535					540				
Glu	Glu	Cys	Lys	Ala	Cys	Thr	Arg	Cys	Gly	Cys	Val	Thr	Met	Leu	Lys
545					550					555					560
Ser	Pro	Asn	Arg	Thr	Thr	Ala	Val	Lys	Gln	Trp	Glu	Gln	Arg	Trp	Ile
				565					570					575	
Lys	Asn	Cys	Leu	Cys	Gly	Gly	Leu	Trp	Trp	Arg	Val	Pro	Leu	Ser	Tyr
			580					585					590		

Pro

<210> 281
 <211> 292
 <212> PRT
 <213> homo sapiens

<400> 281

Leu	Arg	Gly	Thr	Arg	His	Gln	Ser	Pro	Pro	His	Arg	Gln	Phe	Leu	Ile
1				5					10					15	
Gln	Arg	Cys	Ser	His	Cys	Phe	Thr	Ala	Val	Val	Leu	Leu	Gly	Asp	Leu
			20					25					30		
Ser	Met	Val	Thr	Gln	Pro	His	Leu	Val	Gln	Ala	Leu	His	Ser	Ser	Val
		35					40					45			
Gly	Gln	Ala	Pro	Arg	Cys	Ser	Leu	Arg	Arg	Trp	Ser	Ile	Leu	Gly	Trp
	50					55					60				
Pro	Gly	Ala	Leu	Ala	Arg	Pro	Ser	Ser	Cys	Arg	Val	Ala	Ala	Leu	Pro

65

70

113

75

30

Gly	Ser	Val	Gly	Ala 85	Arg	Pro	Asn	Cys	Arg 90	Arg	Arg	Gly	Cys	Leu 95	Gly
Cys	Arg	Arg	Leu 100	Thr	Arg	Pro	Ser	Leu 105	Ala	Gly	Ser	Gln	Ser 110	Arg	Leu
Gly	Ile	Ser 115	Ser	Trp	Leu	Gly	Ser 120	Arg	Gln	His	Ser	Ser 125	Thr	Ser	Ala
Ser	Ser 130	Gly	Ser	Leu	Ala	Gly 135	Pro	Ser	Ser	Arg	Gln 140	Gln	Ile	Gln	Ser
Leu 145	Val	Ser	Arg	Arg	Lys 150	Ser	Arg	Asp	Met	Leu 155	Ser	Trp	Val	Ser	Glu 160
Val	Ala	Val	Tyr	Thr 165	Gly	Arg	Gln	Leu	Gly 170	Phe	Arg	Arg	Pro	Gln 175	Met
Arg	Met	Thr	Thr 180	Ile	Asn	Ser	Arg	Ser 185	Met	Pro	Ser	Glu	Val 190	Pro	Ser
Arg	Arg	Lys 195	Leu	Trp	Pro	Gly	Leu 200	Ser	Arg	Glu	Pro	Trp 205	Leu	Gly	Arg
Leu	Ala 210	Ser	Arg	Tyr	Ser	Thr 215	Lys	Ser	Pro	Thr	His 220	Cys	Lys	Ser	Cys
Cys 225	Ser	Ala	Cys	Ser	Val 230	Phe	Met	Ser	Ser	Thr 235	Asn	Ser	Ser	Val	Leu 240
Arg	Leu	Ile	Met	Thr 245	Leu	Ser	Met	Ser	Thr 250	Ser	Val	Ile	Leu	Val 255	Gln
Ile	Ser	Val	Ser 260	Arg	Ser	Pro	Gly	Leu 265	Leu	Ser	Gly	Val	Leu 270	Arg	Lys
Trp	Gly	Arg 275	Ser	Ser	Asp	Phe	Arg 280	Val	Glu	Leu	Met	Ala 285	Met	Arg	Lys
Ser	Leu 290	Val	Trp												

<210> 282

<211> 172

<212> PRT

<213> homo sapiens

<400> 282

Thr 1	Pro	Ala	Leu	Arg 5	Ala	Arg	119 Ser	Leu	Arg 10	Asp	Arg	Cys	Ala	Arg 15	Ala
Pro	Cys	Pro	His 20	Gly	Gly	Gln	Gln	Arg 25	Arg	Arg	Arg	Arg	Leu 30	Asn	Ala
Glu	Gly	Ala 35	Glu	Gly	Ala	Arg	Gly 40	Gly	Gly	Ser	Ser	Tyr 45	Ser	Glu	Met
Ala	Glu 50	Thr	Val	Ala	Asp	Thr 55	Arg	Arg	Leu	Ile	Thr 60	Lys	Pro	Gln	Asn
Leu 65	Asn	Asp	Ala	Tyr	Gly 70	Pro	Pro	Ser	Asn	Phe 75	Leu	Glu	Ile	Asp	Val 80
Ser	Asn	Pro	Gln	Thr 85	Val	Gly	Val	Gly	Arg 90	Gly	Arg	Phe	Thr	Thr 95	Tyr
Glu	Ile	Arg	Val 100	Lys	Thr	Asn	Leu	Pro 105	Ile	Phe	Lys	Leu	Lys 110	Glu	Ser
Thr	Val	Arg 115	Arg	Arg	Tyr	Ser	Asp 120	Phe	Glu	Trp	Leu	Arg 125	Ser	Glu	Leu
Glu	Arg 130	Glu	Ser	Lys	Val	Val 135	Val	Pro	Pro	Leu	Pro 140	Gly	Lys	Ala	Phe
Leu 145	Arg	Gln	Phe	Leu	Leu 150	Glu	Glu	Met	Met	Glu 155	Tyr	Leu	Met	Thr	Ile 160
Leu	Leu	Arg	Lys	Glu 165	Asn	Lys	Gly	Trp	Ser 170	Ser	Leu				

<210> 283
 <211> 106
 <212> PRT
 <213> homo sapiens

<400> 283

Asn 1	Tyr	Leu	Gly	Arg 5	Phe	Gln	Pro	Gln	Trp 10	Phe	Asn	Asp	Asn	Lys 15	Thr
Thr	Lys	His	Gly 20	Thr	Ser	Asn	Ser	Leu 25	Ile	Lys	Leu	Leu	Ser 30	His	Leu
Phe	His	Arg 35	Met	Met	Arg	Phe	Phe 40	Leu	Phe	Thr	Val	Ser 45	His	Gln	Gly
Lys	Lys 50	Asn	Pro	Pro	Thr	Ser 55	Cys	Leu	Phe	Phe	Phe 60	Leu	Met	Pro	Gly
Ile	Ser	Ile	His	Cys	Leu	Phe	Lys	Arg	Pro	Met	Gln	Lys	Lys	Val	Asp

65					70			120			75				80
Lys	Ala	Leu	Ala	Gln 85	Glu	Leu	Gly	Leu	Pro 90	Val	Val	Val	Pro	Gly 95	Leu
Pro	Cys	Trp	Gly 100	Val	Pro	Lys	Ser	Val 105	Pro						

<210> 284
 <211> 105
 <212> PRT
 <213> homo sapiens

<400> 284

Met 1	Gly	Asn	Phe	Phe 5	Phe	Phe	Glu	Pro	Gly 10	Thr	Cys	Tyr	Val	Ala 15	Gln
Ala	Gly	Leu	Glu 20	Leu	Leu	Asn	Ser	Ser 25	Asp	Pro	Leu	Thr	Ser 30	Ala	Ser
Gln	Ile	Ala 35	Glu	Thr	Thr	Gly	Thr 40	His	His	Cys	Thr	Trp 45	Leu	Lys	Thr
Ile	Phe 50	Leu	Lys	Asn	Lys	Ser 55	Thr	Ala	Leu	His	Leu 60	Tyr	Leu	Leu	Val
Ser 65	Leu	Gln	Phe	Lys	His 70	Thr	Ile	Asn	Asp	Tyr 75	Asn	Ile	Leu	Phe	Lys 80
Ala	Gly	Arg	Ser	Gly 85	Ser	Trp	Leu	Gln	Leu 90	Glu	Gln	Phe	Ile	Thr 95	Ser
Gly	Tyr	Leu	Arg 100	Ala	Arg	Lys	Ile	Gln 105							

<210> 285
 <211> 118
 <212> PRT
 <213> homo sapiens

<400> 285

Thr 1	Gly	Met	Gly	Gly 5	Gly	Ser	Gly	Cys	Arg 10	Glu	Leu	Leu	Cys	Pro 15	Cys
Lys	Gly	Ala	Glu 20	Thr	Pro	Val	Glu	Leu 25	Arg	Lys	Ser	Asp	Gly 30	Ile	Tyr
Arg	Val	Leu 35	Gly	Lys	Pro	Trp	Leu 40	Cys	Leu	His	His	Gly 45	Glu	Arg	Pro
Trp	Ala 50	Gly	Ser	Pro	Pro	Ser 55	Cys	Arg	Ser	Val	Arg 60	Leu	Asp	Ala	Asp

121

Gly 65	Gly	Ser	Asp	Gln	Leu 70	Ala	Ser	Val	Ser	Leu 75	Arg	His	Glu	Ala	Ala 80
Phe	Ser	Ser	Gly	Phe 85	Gln	Ser	His	Ser	Gly 90	Leu	Pro	Met	Ala	Asp 95	Arg
Val	Ala	Lys	Val 100	Arg	Asn	Gly	Lys	Cys 105	Ile	Ala	Val	Tyr	Leu 110	Pro	Ser
Pro	Thr	Lys 115	Gln	Ile	Thr										

<210> 286
 <211> 109
 <212> PRT
 <213> homo sapiens

<400> 286

Tyr 1	Ala	Asn	Gln	Ser 5	Ser	Ser	Leu	Arg	Phe 10	Lys	Ile	Lys	Tyr	Lys 15	Leu
Leu	Cys	Phe	Ser 20	Thr	His	Ser	Gly	Ser 25	Ile	Val	Pro	Glu	Pro 30	Asp	Cys
Tyr	Phe	Phe 35	Ile	Leu	Asn	Ile	Ile 40	Phe	Pro	His	Leu	Ile 45	Cys	Leu	Pro
Leu	Ile 50	His	Arg	His	Leu	Glu 55	Lys	Glu	Met	Gly	Gly 60	Cys	Leu	Leu	Ser
Leu 65	Ser	Leu	Cys	Phe	Val 70	Pro	Val	Val	Arg	Leu 75	Ala	Ala	Ser	Val	Ala 80
Arg	Trp	Ala	Trp	Leu 85	Glu	Pro	Trp	Val	Arg 90	Gln	Val	Ala	Gly	Gly 95	Asp
Arg	Glu	Arg	Leu 100	Arg	Gly	Lys	Trp	Trp 105	His	Leu	Leu	Leu			

<210> 287
 <211> 74
 <212> PRT
 <213> homo sapiens

<400> 287

Ser 1	Gln	Leu	Leu	Gly 5	Arg	Leu	Arg	Gln	Glu 10	Asn	His	Leu	Asn	Ser 15	Gly
Gly	Arg	Gly	Cys 20	Ser	Glu	Leu	Arg	Ser 25	Cys	His	Cys	Thr	Pro 30	Ala	Trp
Ala	Thr	Arg 35	Val	Lys	Leu	Arg	Leu 40	Lys	Lys	Lys	Lys	Lys 45	Glu	Met	Phe

Phe Ile Phe Phe Met Leu Ser Ile Gln Ala Leu Phe His Gly Gln Gln
50 55 60

Val Ile Phe His Asn Val Asp Phe Pro Lys
65 70

<210> 288
<211> 67
<212> PRT
<213> homo sapiens

<400> 288

Arg Arg Gly Phe Leu His Val Gly Gln Ala Gly Leu Glu Phe Leu Thr
1 5 10 15

Ser Gly Asp Pro Pro Ala Ser Ala Thr Gln Ser Ala Gly Ile Thr Gly
20 25 30

Ile Ser His Arg Glu Arg Pro Ile Leu Leu Phe Ile Tyr Phe Leu Arg
35 40 45

Trp Ser Leu Ala Leu Phe Arg Asp Leu Arg Pro Leu Gln Pro Ser Pro
50 55 60

Leu Gln Phe
65

<210> 289
<211> 84
<212> PRT
<213> homo sapiens

<400> 289

Ser Thr Arg Pro Arg Glu Arg Arg Asn Arg Ser Val Asp Glu Cys Gln
1 5 10 15

Leu Ile Asn Val Lys Xxx Arg His Xxx Leu Val Cys Leu Xxx Cys Phe
20 25 30

Cys Leu Tyr Xxx Gln Pro Asp Xxx Val Ser Xxx Glu Tyr Lys Xxx Trp
35 40 45

Gly Leu Leu Pro Gln Xxx Leu Phe Xxx Ile Ser Xxx Glu Lys Lys Asn
50 55 60

Asp Arg Xxx Xxx Gly Xxx Ile Xxx Arg Xxx Ala Arg Phe Xxx Ser Thr
65 70 75 80

Asn Xxx Asn Xxx

<210> 290
<211> 77
<212> PRT
<213> homo sapiens

<400> 290

Met 1	Ser	Xxx	Xxx	Asp 5	Thr	Xxx	Trp	Cys	Val 10	Xxx	Ala	Val	Phe	Ala 15	Phe
Thr	Xxx	Asn	Pro 20	Thr	Val	Phe	His	Xxx 25	Asn	Thr	Asn	Xxx	Gly 30	Xxx	Phe
Tyr	Pro	Xxx 35	Leu	Ser	Ser	Xxx	Leu 40	Val	Lys	Lys	Lys	Lys 45	Met	Ile	Gly
Xxx	Xxx 50	Xxx	Glu	Phe	Xxx	Gly 55	Lys	Pro	Xxx	Xxx	Gln 60	Ala	Leu	Xxx	Lys
Ile 65	Xxx	Ser	Trp	Xxx	Xxx 70	Leu	Thr	Ser	Leu	Pro 75	Xxx	Xxx			

<210> 291

<211> 309

<212> PRT

<213> homo sapiens

<400> 291

Arg 1	Ala	Ala	Ser	Gly 5	Arg	Ser	Gly	Ser	Ser 10	Val	Arg	Met	Ser	Ala 15	Pro
Arg	Ser	Arg	Pro 20	Ala	Ser	Met	Arg	Trp 25	Cys	Pro	Ala	Pro	Arg 30	Arg	Ala
Cys	Thr	Thr 35	Ser	Thr	Arg	Trp	Thr 40	Gly	Pro	Pro	Cys	Ala 45	Thr	Ser	Thr
Ser	Ser 50	Ala	Arg	Ala	Thr	Arg 55	Thr	Gly	Pro	Ser	Cys 60	Arg	Ser	Ala	Gly
Arg 65	Ala	Arg	Ser	Ala	Ser 70	Tyr	Pro	Pro	Gly	Asp 75	Val	Asp	Glu	Ile	Pro 80
Asp	Trp	Val	His	Gln 85	Leu	Val	Ile	Gln	Lys 90	Leu	Val	Glu	His	Arg 95	Val
Ile	Pro	Glu	Gly 100	Phe	Val	Asn	Ser	Ala 105	Val	Ile	Asn	Asp	Tyr 110	Gln	Pro
Gly	Gly	Cys 115	Ile	Val	Ser	His	Val 120	Asp	Pro	Ile	His	Ile 125	Phe	Glu	Arg
Pro	Ile 130	Val	Ser	Val	Ser	Phe 135	Phe	Ser	Asp	Ser	Ala 140	Leu	Cys	Phe	Gly
Cys 145	Lys	Phe	Gln	Phe	Lys 150	Pro	Ile	Arg	Val	Ser 155	Glu	Pro	Val	Leu	Ser 160

Leu	Pro	Val	Arg	Arg 165	Gly	Ser	Val	Thr	Val 170	Leu	Ser	Gly	Tyr	Ala 175	Ala	
Asp	Glu	Ile	Thr 180	His	Cys	Ile	Arg	Pro 185	Gln	Asp	Ile	Lys	Glu 190	Arg	Arg	
Ala	Val	Ile 195	Ile	Leu	Arg	Lys	Thr 200	Arg	Leu	Asp	Ala	Pro 205	Arg	Leu	Glu	
Thr	Lys 210	Ser	Leu	Ser	Ser	Ser 215	Val	Leu	Pro	Pro	Ser 220	Tyr	Ala	Ser	Asp	
Arg 225	Leu	Ser	Gly	Asn	Asn 230	Arg	Asp	Pro	Ala	Leu 235	Lys	Pro	Lys	Arg	Ser 240	
His	Arg	Lys	Ala	Asp 245	Pro	Asp	Ala	Ala	His 250	Arg	Pro	Arg	Ile	Leu 255	Glu	
Met	Asp	Lys	Glu 260	Glu	Asn	Arg	Arg	Ser 265	Val	Leu	Leu	Pro	Thr 270	His	Arg	
Arg	Arg	Gly 275	Ser	Phe	Ser	Ser	Glu 280	Asn	Tyr	Trp	Arg	Lys 285	Ser	Tyr	Glu	
Ser	Ser 290	Glu	Asp	Cys	Ser	Glu 295	Ala	Ala	Gly	Ser	Pro 300	Ala	Arg	Lys	Val	
Lys 305	Met	Arg	Arg	His												
<210> 292																
<211> 191																
<212> PRT																
<213> homo sapiens																
<400> 292																
Ser 1	Cys	Leu	Pro	Glu 5	Asp	Asp	Asp	Cys	Ser 10	Ala	Leu	Leu	Asp	Val 15	Leu	
Arg	Pro	Tyr	Ala 20	Val	Ser	Asp	Phe	Ile 25	Ser	Ser	Ile	Ser	Thr 30	Glu	His	
Ser	His	Ala 35	Ser	Pro	Ala	His	Arg 40	Gln	Gly	Lys	His	Trp 45	Phe	Arg	His	
Pro	Asn 50	Arg	Leu	Glu	Leu	Glu 55	Leu	Ala	Ala	Glu	Ala 60	Gln	Arg	Arg	Val	
Ala 65	Lys	Glu	Gly	His	Gly 70	His	Asp	Gly	Ala	Leu 75	Glu	Asp	Val	Asp	Gly 80	

Val	His	Val	Gly	His 85	Asp	Ala	Ala	Ala	Gly 90	Leu	Val	Val	Val	Asp 95	Asp
Arg	Ala	Val	Asp 100	Glu	Ala	Leu	Gly	Asp 105	Asp	Ala	Val	Leu	His 110	Gln	Leu
Leu	Asp	His 115	Gln	Leu	Met	His	Pro 120	Val	Arg	Asp	Leu	Val 125	Asp	Val	Ala
Arg	Arg 130	Val	Arg	Gly	Ala	Pro 135	Gly	Pro	Ala	Arg	Ala 140	Ser	Ala	Ala	Gly
Pro 145	Arg	Thr	Cys	Ser	Pro 150	Arg	Arg	Arg	Ser	Thr 155	Cys	Cys	Ala	Gly	Gly 160
Pro	Gly	Pro	Pro	Cys 165	Ala	Arg	Cys	Thr	Gly 170	Pro	Ser	Arg	Arg	Gly 175	Thr
Pro	Pro	His	Arg 180	Cys	Gly	Pro	Arg	Ser 185	Trp	Ser	Thr	His	Pro 190	Asp	

<210> 293
 <211> 478
 <212> PRT
 <213> homo sapiens
 <400> 293

Met 1	Gly	Arg	Cys	Cys 5	Phe	Tyr	Thr	Ala	Gly 10	Thr	Leu	Ser	Leu	Leu 15	Leu
Leu	Val	Thr	Ser 20	Val	Thr	Leu	Leu	Val 25	Ala	Arg	Val	Phe	Gln 30	Lys	Ala
Val	Asp	Gln 35	Ser	Ile	Glu	Lys	Lys 40	Ile	Val	Leu	Arg	Asn 45	Gly	Thr	Glu
Ala	Phe 50	Asp	Ser	Trp	Glu	Lys 55	Pro	Pro	Leu	Pro	Val 60	Tyr	Thr	Gln	Phe
Tyr 65	Phe	Phe	Asn	Val	Thr 70	Asn	Pro	Glu	Glu	Ile 75	Leu	Arg	Gly	Glu	Thr 80
Pro	Arg	Val	Glu	Glu 85	Val	Gly	Pro	Tyr	Thr 90	Tyr	Arg	Glu	Leu	Arg 95	Asn
Lys	Ala	Asn	Ile 100	Gln	Phe	Gly	Asp	Asn 105	Gly	Thr	Thr	Ile	Ser 110	Ala	Val
Ser	Asn	Lys 115	Ala	Tyr	Val	Phe	Glu 120	Arg	Asp	Gln	Ser	Val 125	Gly	Asp	Pro

Lys	Ile 130	Asp	Leu	Ile	Arg	Thr 135	Leu	Asn	Ile	Pro	Val 140	Leu	Thr	Val	Ile
Glu 145	Trp	Ser	Gln	Val	His 150	Phe	Leu	Arg	Glu	Ile 155	Ile	Glu	Ala	Met	Leu 160
Lys	Ala	Tyr	Gln	Gln 165	Lys	Leu	Phe	Val	Thr 170	His	Thr	Val	Asp	Glu 175	Leu
Leu	Trp	Gly	Tyr 180	Lys	Asp	Glu	Ile	Leu 185	Ser	Leu	Ile	His	Val 190	Phe	Arg
Pro	Asp	Ile 195	Ser	Pro	Tyr	Phe	Gly 200	Leu	Phe	Tyr	Glu	Lys 205	Asn	Gly	Thr
Asn	Asp 210	Gly	Asp	Tyr	Val	Phe 215	Leu	Thr	Gly	Glu	Asp 220	Ser	Tyr	Leu	Asn
Phe 225	Thr	Lys	Ile	Val	Glu 230	Trp	Asn	Gly	Lys	Thr 235	Ser	Leu	Asp	Trp	Trp 240
Ile	Thr	Asp	Lys	Cys 245	Asn	Met	Ile	Asn	Gly 250	Thr	Asp	Gly	Asp	Ser 255	Phe
His	Pro	Leu	Ile 260	Thr	Lys	Asp	Glu	Val 265	Leu	Tyr	Val	Phe	Pro 270	Ser	Asp
Phe	Cys	Arg 275	Ser	Val	Tyr	Ile	Thr 280	Phe	Ser	Asp	Tyr	Glu 285	Ser	Val	Gln
Gly	Leu 290	Pro	Ala	Phe	Arg	Tyr 295	Lys	Val	Pro	Ala	Glu 300	Ile	Leu	Ala	Asn
Thr 305	Ser	Asp	Asn	Ala	Gly 310	Phe	Cys	Ile	Pro	Glu 315	Gly	Asn	Cys	Leu	Gly 320
Ser	Gly	Val	Leu	Asn 325	Val	Ser	Ile	Cys	Lys 330	Asn	Gly	Ala	Pro	Ile 335	Ile
Met	Ser	Phe	Pro 340	His	Phe	Tyr	Gln	Ala 345	Asp	Glu	Arg	Phe	Val 350	Ser	Ala
Ile	Glu	Gly 355	Met	His	Pro	Asn	Gln 360	Glu	Asp	His	Glu	Thr 365	Phe	Val	Asp
Ile	Asn 370	Pro	Leu	Thr	Gly	Ile 375	Ile	Leu	Lys	Ala	Ala 380	Lys	Arg	Phe	Gln

Ile 385	Asn	Ile	Tyr	Val	Lys 390	Lys	Leu	Asp	Asp	Phe 395	Val	Glu	Thr	Gly	Asp 400
Ile	Arg	Thr	Met	Val 405	Phe	Pro	Val	Met	Tyr 410	Leu	Asn	Glu	Ser	Val 415	His
Ile	Asp	Lys	Glu 420	Thr	Ala	Ser	Arg	Leu 425	Lys	Ser	Met	Ile	Asn 430	Thr	Thr
Leu	Ile	Ile 435	Thr	Asn	Ile	Pro	Tyr 440	Ile	Ile	Met	Ala	Leu 445	Gly	Val	Phe
Phe	Gly 450	Leu	Val	Phe	Thr	Trp 455	Leu	Ala	Cys	Lys	Gly 460	Gln	Gly	Ser	Met
Asp 465	Glu	Gly	Thr	Ala	Asp 470	Glu	Arg	Ala	Pro	Leu 475	Ile	Arg	Thr		

<210> 294
 <211> 266
 <212> PRT
 <213> homo sapiens
 <400> 294

Ala 1	Phe	Leu	Pro	Ser 5	Pro	Thr	Val	Ala	Ala 10	Gln	Ala	Ala	Ala	Arg 15	Glu
His	Ala	Gly	Gly 20	His	Ser	Ala	Ala	Lys 25	Asn	Gly	Ala	Thr	Gly 30	Val	Glu
Leu	Asp	Ile 35	Glu	Phe	Thr	Ser	Asp 40	Gly	Ile	Pro	Val	Leu 45	Met	His	Asp
Asn	Thr 50	Val	Asp	Arg	Thr	Thr 55	Asp	Gly	Thr	Gly	Arg 60	Leu	Cys	Asp	Leu
Thr 65	Phe	Glu	Gln	Ile	Arg 70	Lys	Leu	Asn	Pro	Ala 75	Ala	Asn	His	Arg	Leu 80
Arg	Asn	Asp	Phe	Pro 85	Asp	Glu	Lys	Ile	Pro 90	Thr	Leu	Arg	Glu	Ala 95	Val
Ala	Glu	Cys	Leu 100	Asn	His	Asn	Leu	Thr 105	Ile	Phe	Phe	Asp	Val 110	Lys	Gly
His	Ala	His 115	Lys	Ala	Thr	Glu	Ala 120	Leu	Lys	Lys	Met	Tyr 125	Met	Glu	Phe
Pro	Gln 130	Leu	Tyr	Asn	Asn	Ser 135	Val	Val	Cys	Ser	Phe 140	Leu	Pro	Glu	Val

Ile 145	Tyr	Lys	Met	Arg	Gln 150	Thr	Asp	Arg	Asp	Val 155	Ile	Thr	Ala	Leu	Thr 160
His	Arg	Pro	Trp	Ser 165	Leu	Ser	His	Thr	Gly 170	Asp	Gly	Lys	Pro	Arg 175	Tyr
Asp	Thr	Phe	Trp 180	Lys	His	Phe	Ile	Phe 185	Val	Met	Met	Asp	Ile 190	Leu	Leu
Asp	Trp	Ser 195	Met	His	Asn	Ile	Leu 200	Trp	Tyr	Leu	Cys	Gly 205	Ile	Ser	Ala
Phe	Leu 210	Met	Gln	Lys	Asp	Phe 215	Val	Ser	Pro	Ala	Tyr 220	Leu	Lys	Lys	Trp
Ser 225	Ala	Lys	Gly	Ile	Gln 230	Val	Val	Gly	Trp	Thr 235	Val	Asn	Thr	Phe	Asp 240
Glu	Lys	Ser	Tyr	Tyr 245	Glu	Ser	His	Leu	Gly 250	Ser	Ser	Tyr	Ile	Thr 255	Asp
Ser	Met	Val	Glu 260	Asp	Cys	Glu	Pro	His 265	Phe						

<210> 295
 <211> 165
 <212> PRT
 <213> homo sapiens
 <400> 295

Gln 1	Ile	Leu	Pro	Ala 5	Phe	Ile	Leu	Leu	Phe 10	Asn	Gly	Leu	Lys	Arg 15	Ala
Tyr	Ala	Cys	His 20	Ala	Glu	His	Glu	Thr 25	Glu	Glu	Leu	Gly	Ser 30	Asp	Glu
Asp	Asp	Ile 35	Asp	Glu	Asp	Gly	Gln 40	Glu	Tyr	Leu	Glu	Ile 45	Leu	Ala	Lys
Gln	Ala 50	Gly	Glu	Asp	Gly	Asp 55	Asp	Glu	Asp	Trp	Glu 60	Glu	Asp	Asp	Ala
Glu 65	Glu	Thr	Ala	Leu	Glu 70	Gly	Tyr	Ser	Thr	Ile 75	Ile	Asp	Asp	Glu	Asp 80
Asn	Pro	Val	Asp	Glu 85	Tyr	Gln	Ile	Phe	Lys 90	Ala	Ile	Phe	Gln	Thr 95	Ile
Gln	Asn	Arg	Asn 100	Pro	Val	Trp	Tyr	Gln 105	Ala	Leu	Thr	His	Gly 110	Leu	Asn

[illegible]